



UNIVERSITY OF NAIROBI

DEPARTMENT OF DIPLOMACY AND INTERNATIONAL STUDIES

**THE ROLE OF CIVIL AVIATION IN PROMOTING INTERNATIONAL TRADE IN
AFRICA: A CASE STUDY OF KENYA AVIATION INDUSTRY**

BY

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**A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILLMENT OF THE
DEGREE OF MASTES OF ARTS IN INTERNATIONAL STUDIES**

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2021

DECLARATION

I Eunice A J Dobby declare that this research is my original work and has not been submitted for a degree in any other university

Signature_____



_____Date_____

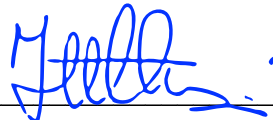
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This research has been submitted for examination with my approval as a university supervisor in partial fulfilment on the examination board requirements for the award of the degree of Master of Arts in International Studies in the University of Nairobi, Kenya

Signature_____



_____Date_____

17th November 2021

Dr. John Lekuton

DEDICATION

This study is dedicated to my husband, children, and participants of NDC Course 23, whose encouragement and moral support have enabled me to complete this study.

ACKNOWLEDGMENT

I wish to acknowledge my Supervisor Dr. John Lekuton whose guidance and support were invaluable throughout the study. His diligence, personal interest, wisdom, and constant resourceful guidance helped me maintain focus on the subject of the study.

Abstract

This study sought to determine the perceived influence of African civil aviation in promoting international trade. We argue that liberalization of African air transport will enhance connectivity, service quality, choice, and fair competitiveness in trade. Specifically, the study sought to determine the underlying factors influencing implementation of the Yamoussoukro Decision. It establishes policy challenges confronting Kenya's civil aviation in the realization of the Yamoussoukro Decision. It also determines factors influencing full implementation of the safer skies policy in Kenya given benefits of air transport to the economy and international trade. The study depended on both primary and secondary data and employed a cross-sectional descriptive research design to examine the impact of civil aviation sector on the international trade in Kenya. The study utilized international trade and liberalization theory to assess the levels of perceived impact of liberalization of air transport services on international trade in Africa. The study findings are that, there are several factors, which hamper and influence Africa's liberalization of air services that includes restriction of air services by some African countries, lack of implementation of the YD by some countries, failure to sign and ratify the Abuja treaty, unfair competition from booming international airlines as well as lack of harmonization of tax charges among others. The study recommends that in order to achieve a safe and secure oversight regime capable of facilitating international trade, the countries, which have not ratified the YD, should do so in order to enable realization of the open sky policy in Africa. Further, there is need to review the land use policy in and adjacent to designated aviation zone in order to prevent construction of buildings and infrastructures which could potentially obstruct aircraft maneuvers.

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ABBREVIATIONS AND ACRONYMS

AATP	-	Authority's Air Transport Department
AFCAC	-	The African Civil Aviation Commission
AFCAP	-	African Civil Aviation Policy
AFCFTA	-	African Continental Free Trade Agreement
APIS	-	Advance Passenger Information system,
ATFI	-	Air Trade facilitation Index
AU	-	Africa Union
BAGASOO	-	Banjul Accord Group Aviation Safety Oversight Organization
BASAs	-	Bilateral Air Service Agreements
CAA	-	Civil Aviation Authorities
CASSOA	-	Civil Aviation Safety and Security Oversight Agency
COMESA	-	Common Market for East and South Africa
EAC	-	East African Community
EAE	-	Ethiopian Airports Enterprises
FAA	-	Federal Aviation Administration
GASP	-	Global Aviation Safety Plan
GATT	-	General Agreement on Tariffs and Trade
HRDF	-	Human Resources Development Fund
IATA	-	International Air Transport Association

ICAO	-	International Civil Aviation Organization
IOSA	-	International Operational Safety Audit
JCA	-	Joint Competitive Authority
KAAO	-	Kenya Association of Air Operators
KCAA	-	Kenya Civil Aviation Authority
KNCAA	-	Kenya National Civil Aviation Authority
LCCs	-	Low Cost Carriers
MTOW	-	Maximum Take-Off Weight
NACOSTI	-	National Commission for Science, Technology and Innovation
NDC	-	National Defence College
NEMA	-	national environment regulator
OAU	-	Organization of Africa Union
RECs	-	Regional Economic Communities
RSOOs	-	Regional Safety Oversight Organizations
SAATM	-	Single African Air Transport Market
SADC	-	Southern Africa Development Community
SAPS	-	Standards and Recommended Practices
SIDA	-	Security Identification Display Area
SSCs	-	Significant Safety Concerns
WTO	-	World Trade Organization
YD	-	Yamoussoukro Declaration

CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.0 Introduction

This study offers a background of the Civil Aviation in Africa as well as in Kenya and its role in promoting international trade. The introduction contextualizes the impact of civil aviation on international trade with a reference to the Kenya civil aviation sector. It states the study problem, research questions to be answered, justification, limitations and the theoretical paradigm conceptualizing the study framework. The methodological approach to be used to address the research problem is explained while highlighting the outline the structure and organization of the paper.

1.1 Background of the Study

Today's economic growth is not possible without the contribution of civil aviation made possible by an updated airport infrastructure, efficient and safe international air transport networks¹. The object of Member State of the International Civil Aviation Organization (ICAO) is to enhance the benefits to consumers and choices through improved air connectivity and reduced costs in performing State's economic regulatory functions, among others. The ICAO Member States resolved to continue with liberalization of the air transports while ensuring safety, security and non-discriminatory principle to all member states and their stakeholders.²This is in recognition of the important role of air transport in world trade, the

¹Higgoda, R. and Madurapperuma, M.W. (2019) Dynamic Nexus between Air-Transportation and Economic Growth: A Systematic Literature Review. *Journal of Transportation Technologies*, 9, 156-170.

²ICAO (2003). Background to Experiences of Liberalization in Africa. International Civil Aviation Organization.

stimulation of tourism, generation of employment and wealth, and its catalytic benefit to business operations, investment and serve larger markets.³

Since, the first jet airliner flight in 1949, aviation has continued to provide the only safest and fastest mode of transport, and makes movement of people and goods easy, improves the tourism sector as well as enhances the economic growth and development, particularly in developing countries.⁴The global trend in civil aviation is seen in terms of liberalization permeating all aspects of the aviation industry and steady reduction of state control. Hence many States are collaborating among themselves and harmonizing their regulations to bring about the desired degree of order in air transport networks and just-in-time deliveries of large inventories globally.⁵However, overall success has been too slow due to lack of political will, institutional and procedural constraints, cost-competitiveness and safety concerns holding the continent back from achieving its potential.⁶

1.2 Statement of Research Problem

The bedrock of African civil aviation lies on the liberalization of air transport due to its potential to enhance connectivity, service quality, choice and competitiveness. The Africa Union (AU) adopted African Civil Aviation Policy (AFCAP) , which enlists the political commitment by majority of countries in Africa through consensus to position Africa's air transport in the global economy. This policy is advanced by the Yamoussoukro Declaration (YD), which provides the legal dimension and the backbone for the intra-African liberalization of the aviation

³Chi, J. and Beak, J. (2013) Dynamic Relationship between Air Transport Demand and Economic Growth in the United States: A New Look. *Transport Policy*, 29, 257-260.

⁴Hallion, Richard P (2008). Airplanes that Transformed Aviation. Sixteen historic designs that changed the game. *Air & Space Magazine*

⁵ Button, K. J. and Taylor, S.Y. (2000), "International air transport and economic development", *Journal of Air Transport Management*, 6(4), 209–222

⁶ Pederson, P.O. (2000) The Changing Structure of Transport under Trade Liberalization and Globalization and its Impact on African Development, CDR working paper, Center for Development, Denmark.

network on the African continent. The YD provides significant benefits arising from the deregulation and liberalization of African aviation market. Sizable benefits are demonstrated by the expansion of flight frequency and route networks by among others, Kenya Airways and Ethiopian Airline in Eastern Africa. This has contributed towards the reduction of operational cost due to economies of scale. Despite these benefits, there is no explanation why the liberalization does not improve international trade in Africa. Further, there are few studies that highlight the risk of exposing small carriers to international competition ruining their business, especially in Africa where traffic is relatively low leading to low international trade. This is partly contributed by lack of full implementation of the YD due to lack of harmonization of regional regulations with the continental framework for single air transport market, and weak states oversight system due to inadequate funding and technical personnel. This study therefore, sets to determine factors, which are perceived to influence the impact of African civil aviation on international trade and specifically in the Kenyan aviation industry.

1.3 Research Questions

The study outcomes will be delivered by answering the following study questions:

- i) What are the underlying factors that impact full implementation of Yamoussoukro Decision?
- ii) What are the policies challenges confronting Kenya's civil aviation in the realization of the Yamoussoukro Decision?
- iii) What factors contribute towards full implementation of the safer skies policy in Kenya given its probable benefits on air transport, economy, and international trade?

1.4 Objectives of the Study

1.4.1 General Objective

The overall objective of this study is to determine perceived influence of African civil aviation on international trade.

1.4.2 Specific Objectives

- i) To determine underlying factors influencing implementation of the Yamoussoukro Decision
- ii) To establish policy challenges confronting Kenya's civil aviation in the realization of the Yamoussoukro Decision.
- iii) To determine factors influencing full implementation of the safer skies policy in Kenya given the benefits on air transport to the economy and international trade.

1.5 Literature Review

1.5.1 Liberalization of Air Services in Africa

The process of liberalizing air services in Africa originates from the worldwide trend, which had a strong impact on African carriers with profits through the competition policy, international tariffs, and fair competition, and the continent-wide liberalization of intra-African air services promoted by the YD. The most remarkable effect of the YD on air transport is promoting and strengthening some of the weak African carriers, such as Ethiopian Airlines and Kenya Airways which extended their services internationally with increased benefits. This made the weaker carriers to have an opportunity to compete with other booming air carriers from developed countries. It also provided an avenue for other international carriers to trade in the African continent.

1.5.2 Civil Aviation in Africa

Africa strategically depends on air transport to move people, goods and services to the rest of the world. It hosts 13% of the world's population but has the smallest air services, lacks adequate air transport infrastructure and technical capacity. But has a greater growth potential than any other regions⁷. Hence, the establishment of The African Civil Aviation Commission (AFCAC) to facilitate cooperation and coordination towards an integrated and sustainable Air transport systems. The objective is to coordinate matters of civil aviation in Africa and cooperate with ICAO and other organizations to promote and develop civil aviation in line with the OAU (Organization of Africa Union) Charter and Abuja Treaty, foster the application of ICAO and Standards and Recommended Practices (SARPS) for controlling air transport, and assessing problems that prevent development and operation of the ACAO. AFCAC is critical towards a Single African Air Transport Market (SAATM)⁸.

International air transport, defined as a series of scheduled flights performed by aircraft which is open to public “for transportation of passengers, cargo or mail” and may be subject to restrictions by each Contracting State, significantly contributing to Africa's economic growth and prosperity through its support to business, trade, tourism, cultural and social activities⁹.

It provides “catalytic benefits” to business organizations, industries and communities by facilitating faster access to supplies to meet customer demands and realizing their competitive advantage¹⁰ through its transportation network. Thus making Africa region essentially part of the

⁷ Michael Gill. (2018). Air Transport Action Group. AVIATION BEYOND BORDERS

⁸ Iyabo O. Sosina. (2015). The AFCAC experience. First Meeting of the APAC Civil Aviation Commission Task Force Bangkok, Thailand.

⁹ ICAO Doc 9587 Policy & Guidance Material on Economic Regulation of International Air Transport, 4th Edition - 2016

¹⁰ Dimitriou, D and Sartzetaki M. (2018) Assessing Air Transport Socio-Economic Footprint. International Journal of Transportation Science and Technology, 7, 283-290.

global business and tourism¹¹ hub. However, States within Africa have unique technical as well as liberalization challenges, which affect their regulatory/oversight responsibilities and competitiveness in the global trade markets. Hence, ICAO and AFCAC continue to provide valuable capacity-building to States through HRDF.¹² Some States have formed Regional Safety Oversight Organizations (RSOOs) to pool resources and to increase their regulatory and oversight capabilities. Typical are the EAC, the Civil Aviation Safety and Security Oversight Agency (CASSOA) and Banjul Accord Group Aviation Safety Oversight Organization (BAGASOO).

1.5.3 Open Skies for Africa – Implementing the Yamoussoukro Decision

In order to realize benefits from opening of African skies and air transport, the initial steps were to adopt the “Declaration of Yamoussoukro on a New African Air Transport Policy”, known as the “Yamoussoukro Declaration” (YD). The YD of 1999 offers a complete liberalization on scheduled and freight air services, market accessibility via single airlines. It is to eliminate ownership restriction by creating a total liberalization of tariffs, frequencies and capabilities. It also offers eligibility procedure for African States community security, carriers and safety standards, parameters for dispute settlement and fair competition, and consumer protection.

The YD is to be implemented through policies and plans at the local and regional levels. Essentially, the YD provides for liberalization of the African air transport for the member states, where airlines from member states can trade and fly on each other’s territory freely. It aimed at removing all trade barriers and tariffs. The YD calls for, among others: “Full liberalization of

¹¹ Chi, J. and Beak, J. (2013) Dynamic Relationship between Air Transport Demand and Economic Growth in the United States: A New Look. *Transport Policy*, 29, 257-260.

¹² Mesfin Fikru Woldeyohannes. (2013). Constitutive Assembly of the Association of African Aviation Training Organizations (AATO) Assembly. Efforts and commitment towards the provision of sustainable Aviation Training in Africa.

intra-African air transport services in terms of access, capacity, frequency, and tariffs; Free exercise of first, second, third, fourth and fifth freedom rights for passenger and freight air services by eligible airlines; Liberalized tariffs and fair competition; and Compliance with established ICAO safety standards and recommended practices”.

Several African States have shown that liberalization of the civil aviation frameworks is vital in fostering tourism growth. Full YD execution ensures that there is a single market in African. It abolishes bilateral air service conventions between States and routes and freeing movement of goods and cross-border investment in the air transport sector. As such, African states airlines under the ownership of African governments and nationals can follow regional safety oversight directions, harmonize competition control and adhere to technical and security standards. Air transport is essential while its reliability promotes the arrival of many tourists to a given State.

In the spirit of SAATM, and AFCAP, many States in Africa have put in place regulatory criteria to manage their international trade to expedite full implementation of the YD. The YD is purposed for a gradual and progressive liberalization of air transport services with the understanding that air transport services provide a more diversified export and an expansion of tourism across the continent. Liberalization of the air transport offers alternative shorter routes which enables flights to take short time to reach their destinations as well as lower prices for the passengers.

1.5.4 Impact of Liberalization on Air Transport in Africa

The liberalization of air services, commonly referred to as airline deregulation removes all travel restrictions on the carriers thus increasing economic growth and development. The YD has revived the markets which had collapsed and allowed other international carriers to access

them. It has therefore allowed freedom by all carriers to transverse from one territory to another. This made the “Ethiopian Airlines and Kenyan Airways”, to increase their market shares predominantly in West and Central Africa.

The removal of regulation due to liberalization policy led to unfair competition and reduction in prices. This has impacted demand and supply for the international air travel because of decline in pressure on costs from the private carriers that alleviate inefficiency in the industry and route expansion.¹³The African Civil Aviation policy calls for improvement of air transport services and demand for international air services. Reduction of prices brought about by liberalization of the air transport has led to increase in demand by passengers travelling internationally and locally.¹⁴

1.5.5 Development of Civil Aviation in Kenya

Kenya falls within the East Africa’s air transport sector, which has experienced development of its air transport services since 2001. The Kenya Civil Aviation Authority (KCAA) is linked with the Ministry of Transport. Through the Authority’s Air Transport Department (AATP), the Authority is responsible for implementing Annex 9 of the ICAO and facilitation of YD at national level. The Authority promulgates aviation policies and regulations to comply with its international obligations. The Air Transport Department has undertaken to develop a dynamic and sustainable air transport system in Kenya by processing and issuing “Air Service Licenses, Temporary Air Service Licenses, adhoc Permits, Aircraft lease approvals, and Domestic scheduled air service approvals”.

KCAA also participates in negotiating Air Services Agreements with other states in conjunction with other government agencies. It assists the “Ministry of Transport, Infrastructure,

¹³ Button and Drexler (2006)

¹⁴Grancay (2009).

Housing, Urban Development and Public Works, in enforcing the provisions of the Bilateral Air Services Agreements” as well as reviewing the existing agreements. KCAA therefore, not only plays the part of general coordinator, but also is the national focal point for communications with ICAO. Besides these activities, the KCAA sets out aviation law and regulations on facilitation, supports the application of the API system, and engages with the aviation industry and other national authorities to ensure national facilitation objectives are achieved. Kenya has therefore reformed its air transport policies for opening the air transport. The process of opening the domestic air transport has not been successful with Kenya Airways remaining the only major operator.

1.6 Justification and Significance of the Study

While civil aviation has grown and impacted on international trade and tourism in Africa, there is little research that extensively shows clear effect of this growth¹⁵and specifically in Kenya aviation industry. This study will try to fill this gap by contributing to civil aviation research base by assessing the levels of perceived impact of air transport services on international trade in Africa and specifically in Kenya aviation industry.

This study will also help policy makers to understand and determine possible challenges in balancing the positive prospects of liberalization against its impacts on the aviation industry and the country at large, in their day-today policy making process. Similarly, demand for civil aviation is characterized by constant fluctuation, seasonality, directional flow and perishability, which make African airline industry to be more fragile than other parts of the world.

¹⁵T.T. Koo, C. Lim, F. Dobruszkes *Causality in direct air services and tourism demand*, Annals of Tourism Research, 67(2017), pp. 67-77

This study will, therefore, complement the existing research by informing the public on Kenya's experience, identify shortcomings of the civil aviation policy, and possible mitigative measures on the numerous industry's challenges. The study will also make an academic contribution on the concept of liberalization by reinforcing a pool of knowledge on air transport liberalization, the concept of international trade in Kenya and the health of the academic discipline, reference material and citations.¹⁶

1.7 Empirical Theoretical Review

1.7.1 International Trade Theory

The international trade theory attempts to explain why countries engage in trade and the benefits that emerge in such transactions. The classical theories state that countries involve in international trade due to costs in production and available markets in other countries.¹⁷ Therefore, it's important for countries to export goods that are competitive and import ones that are not readily available in the domestic market. For instance, majority of countries in Africa import manufactured products due to imperfect competition, differing technology advancement, tastes among other factors and export primary commodities.¹⁸ Trade allows stable demand and supply that results to enhanced economic growth and development in countries.¹⁹ Additionally, inequality in distribution of natural resources and change in climatic conditions globally have made trade inevitable thus complementing domestic production.²⁰

¹⁶IATA 2007a, p. 18

¹⁷Nahanga Verter (2017). International Trade: The Position of Africa in Global Merchandise Trade, Emerging Issues in Economics and Development, Musa Jega Ibrahim, IntechOpen.

¹⁸Porter ME. The Competitive Advantage of Nations. New York: Free Press; 1990

¹⁹Stiglitz JE, Charlton E. Fair Trade for All: How Trade can Promote Development. Oxford University Press, 2007

²⁰Krugman PR, Obstfeld M, Melitz MJ. International Economics: Theory and Policy. 9th ed. Pearson Addison-Wesley; 2010

1.7.2 Trade Liberalization Theory

Trade liberalization theory explains the nexus between the role of civil aviation and international trade since it is the reverse of protectionism²¹. The theory is propagated through the creation of liberal trade policies and practices among states, which aim to remove tariffs and non-tariff barriers to trade (licenses, quotas and technical specifications among other barriers).

The major proponents of the liberalization theory include the GATT and the WTO as the driving forces for free trade given that performance of more outward-looking economies is assumed to be more superior than those countries which pursue more inward-looking trade practices²². This study will utilize liberalization theory to understand free air markets in Africa. It is also used to understand the role played by Kenya civil aviation to implement the YD, which seeks to liberalize the African Air transport markets. The study further utilizes this theory to measure the level of harmonization of national air transport policies will allow fair competition in the international market.

1.7.3 The Economic Theory of Liberalization

This theory explores some of the theories that describe the concept of liberalization scientifically and assesses the possibility of fare outcome of regulatory regimes.²³ According to the theory, international traffic experienced between two countries, which are regulated by BASA regulatory regime, is presumed to have a linear demand. The supply demand determines the fares and capacity in the international market.

The theory supports the liberal air transport system which provides an avenue for market growth, fair prices and competition but it does not provide solutions for safeguarding the national carriers that were initially being protected by a regulatory regime, as well as how small carriers can fairly

²¹Hillman, A, L, 2008

²²Santos-Paulino and Amelia, 2005

²³Button and Drexler (2006)

compete with larger carriers from developed countries. The theory needs to provide solutions to other challenges confronting regulation.

1.8 Conceptual Framework

A conceptual Framework is “arranged in a logical structure to provide a picture or visual display of how ideas in a study relate to one another”.²⁴ It provides an avenue for presentation of research questions based on the problem statement that presents the context and issues that cause the study to be conducted.²⁵ In this study, several factors influence Africa’s international trade. The key factors are Africa’s civil aviation (Independent Variable), KCAA policy and regulatory actions (Moderating Variable), African International Trade (Dependent Variable) as shown in

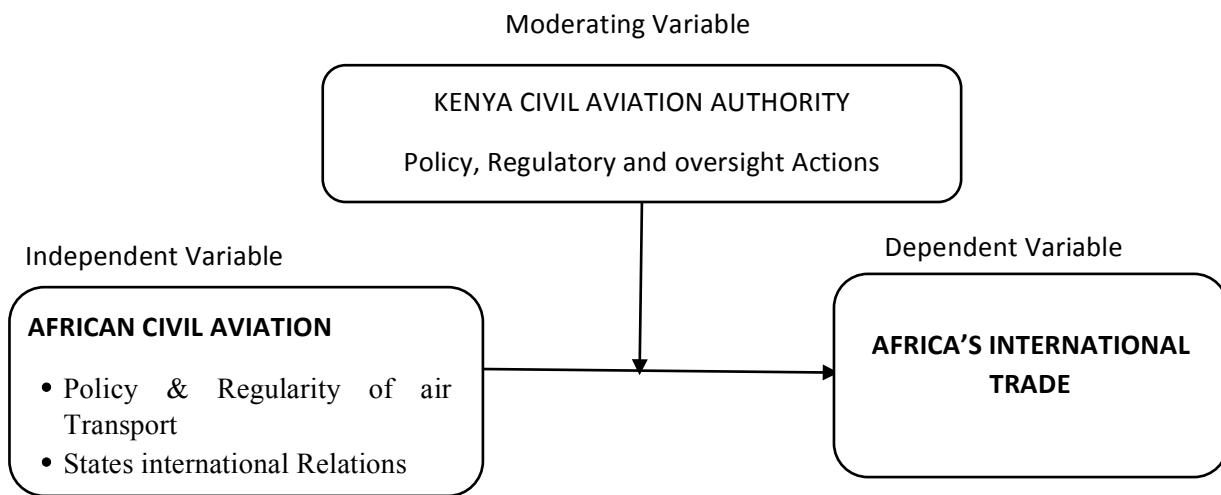


Figure 1: Conceptual Framework

Source: Researcher, 2020

African Civil Aviation provides “catalytic benefits” to business organizations, industries and communities by facilitating faster access to supplies through its transportation network,

²⁴Grant and Osanloo, 2014

²⁵Ngulube, et al 2015: 43-66

making Africa region essentially part of the global business and tourism. AFCAC, the technical arm of the AU, cooperates with ICAO, IATA, regional bodies and States to promote civil aviation in line with the OAU Charter, Abuja Treaty and ICAO SARPS. It receives complaints from States and airlines which may hinder the development and operation of a SAATM, investigates those complaints, and makes recommendations for actions by States.

Africa's international trade is influenced by actions and policies set by AFCAC and moderated by other continental civil aviation authorities such as the KCAA. KCAA is mandated with the responsibility of planning, managing, regulating and operating a safe, economically efficient and sustainable civil aviation system in Kenya. The scope will be limited to Air Transport Department at KCAA which is responsible for articulating open trade relations among African air markets. The impact of KCAA's regulatory and oversight role is therefore critical and determined by the capacity of its Air Transport Department to foster international trade among African countries.

1.9 Research Methodology

This section presents the methodology that was adopted in this study. It includes “research design, study area, Target population, sample size determination and sampling procedures, data collection methods and procedures, data analysis as well as ethical considerations”.

1.9.1 Research Design

Research design is “a blueprint or a detailed plan of how a research is to be completed”. It involves forming a broad research question, deciding upon a unit of analysis, operationalizing variables, collecting and analyzing data from a selected sample giving result of interest.²⁶Cross-

²⁶Thyer, 1993:94

sectional descriptive research design was adopted to examine levels of impact of civil aviation sector on the international trade at one point in time in Kenya. This design helps in casting light on the study questions through in-depth semi-structured questions where qualitative and quantitative data was used to determine correlational relationships between key variables to describe form and structure of the study phenomenon.²⁷ The design helps to generate data with the help of questionnaires.

1.9.2 Study Area

The study was conducted at various places, among them; KCAA Headquarters, Ministry of Transport, IATA country office and Kenya Airways. These areas were considered for their relatedness with subject under study. For instance, KCAA was chosen due to its role as the national agency responsible for regulating and overseeing civil aviation in Kenya as well as implementing the YD.

1.9.3 Target Population

Target population is “the group of individuals or participants with specific attributes of interest and relevance, the researcher wishes to draw the sample from”.²⁸ It excludes individuals who qualify to participate but cannot participate to allow for “the most appropriate” sample, by avoiding violation related to the study assumption, context or goal that is likely to affect the study outcome.²⁹ The target population in this study was Kenya Airways management research and policy managers as well as (Flight and Cabin Crew), KCAA Officials, Wilson Airport (Flight and Cabin Crew), Ministry of Transport Staffs and Intra-African businesspersons. These stratified groups of respondents are deemed knowledgeable on the subject under research. A

²⁷Daniels, 2011

²⁸Creswell, 2011:1-16

²⁹Asiamah, et al., 2017: 1607-1622

target population of 100 respondents was deemed appropriate for acquisition of rich blend of information, which adequately informs the current research.

1.9.4 Sample Size and Sampling Procedure

Designing the sample should be guided by the objective of the study, the problem to be resolved, and available time and resources.³⁰ This study therefore, used samples drawn from the study cases (population) using Yamane's (1967:886) simplified formula to calculate sample sizes using 95% confidence level and 10% level of precision, which prevents biasness.³¹ The study used purposive approach as a non-probability sampling³² to help provide desired information on the basis of participants' knowledge, relationship and expertise on phenomenon under study and their ability to provide necessary data³³.

A sample size of 99 respondents drawn from KCAA inspectors and Ministry of Transport personnel was targeted due to their considered experience and knowledge on the subject. The KCAA top official offered credible insight on the performance of Kenya civil aviation in relation to the intra-African trade. Ministry of Transport officials provided data on the performance of Kenya airlines serving African destination and the policy plans for the government. IATA officials were selected for they provide international regulation for national aviation as well as keep safety record and security details of the aviation sector in the country. The intra-African businesspersons were selected for they hold credible information relating to travel challenges they confront as they traverse the continent utilizing Air transport.

³⁰ Copper and Schindler (2008)

³¹ Israel, 1992

³² Cavanaugh *et al.*, 2001

³³ Freedman *et al.*, 2007

Table 1: Target Population and the Sampling Size

Target Sample	Size of Sample
Ministry of Transport Staffs	20
KCAA Officials and IATA Officials	20
Wilson Airport (Flight and Cabin Crew)	20
Intra Businesspersons	20
JKIA (Flight and Cabin Crew)	20
Total	100

Source; Researcher, 2020

1.9.4.1 Sampling Procedure

The researcher employed proportionate stratified sampling and random sampling methods to achieve maximum reliable responses. This study proposal assumed that all stratified groups have enough knowledge on the study subject.

1.9.5 Data Collection instruments and Procedures

The researcher used triangulation methods of data collection. Triangulation involves the use of two or more data instruments to collect the necessary data.³⁴ This is also anchored on trustworthiness of data³⁵ and the researcher used both primary and secondary data collection instruments to generate quantitative and qualitative data. Quantitative data was collected from the targeted respondents using a questionnaire with both closed and open-ended questions.

The researcher sought the required permits in order to collect data from the target respondents. The researcher assured the respondents that the information they offered was to be used for academic purpose only. Seeking the respondents consent ensured that they gave trustworthy information. The researcher booked appointments with any random senior officials from the Transport Ministries for interview on the subject under investigation.

³⁴Ogula (2008)

³⁵Glesne, 2009

1.9.6 Data Analysis

Data was coded as part of data analysis under broad categorization guided by the research questions. Content analysis was utilized to analyze primary data.³⁶ Primary data and secondary data was categorized and synthesized to come up with integrated thematic issues, discussed in different chapters in relation to the study's research objectives. The justification of using these methods of data analysis was due to the fact that, some respondents gave similar answers to particular questions. Regression analysis was also utilized in analyzing the key variables.

1.9.7 Ethical Considerations

This study was subjected to six ethical considerations in order to add significance that occur during in-depth interviews, focus groups discussions or while observing people's behavior.³⁷ They include "Voluntary participation, informed consent, confidentiality and anonymity, potential for harm, communicating results", among others. The researcher ensured that she sought the respondents' consent before engaging them.³⁸ Further, stricter principle of anonymity was maintained throughout the study as a guarantee of privacy, secret to ethnic or cultural background of respondents.³⁹ This study also guaranteed confidentiality of information obtained from the participants with an assurance that the information obtained was used solely for academic purposes. Further, this study ensured the participants are not put in a situation of physical and psychological harm. All sources used in the study were properly acknowledged to avoid plagiarism and person's right.⁴⁰

³⁶Hsieh and Shannon, 2005

³⁷Resnik, 2011

³⁸Resnik, 2011

³⁹Mugenda, 2003

⁴⁰Blumberg et al, 2005

1.10 Chapter Outline

This research comprises of five chapters.

Chapter one focuses on introducing the problem of the study, give its background, state the research objectives, questions and hypotheses. It gives the justification of the study, provides theoretical and conceptual frameworks of the study as well as the scope of the study.

Chapter two determines underlying factors influencing implementation of the Yamoussoukro Decision.

Chapter three establishes policy challenges confronting Kenya's civil aviation in the realization of the Yamoussoukro Decision.

Chapter four determines factors influencing full implementation of the safer skies policy in Kenya given benefits of air transport to the economy and international trade.

Chapter five provides the summary, conclusion and recommendations of the study.

Every chapter endeavors to present the cardinal findings established in brief and detailed chapter summary.

CHAPTER TWO

THE FACTORS INFLUENCING THE IMPLEMENTATION OF THE YAMOOUSSOUKRO DECISION

2.1 Introduction

This chapter primarily focuses on factors facilitating or hindering the continent's ability for achieving a safe and secure oversight regime, capable of facilitating international trade before providing the research findings on the first objective. The chapter offers both policy, institutional and governance factors, which influence Africa's liberalization of air services by focusing on the factors, which influence the implementation of the YD in selected African countries. To achieve this, the chapter examines the current status of Africa's open skies policy and the current status of ratification among African countries of the YD. It then shows the response rate of the study; a description of the demographic characteristic of the respondents and findings from the questionnaires that were presented to the study participants. In this regard, the findings obtained are discussed against the literature reviewed in chapter one. A chapter summary section is finally presented.

2.2 Policy factors influencing implementation of Yamoussoukro Decision

The Yamoussoukro decision of 2000 signed by 44 members of the AU, envisioned for a full liberalization of air transport in Africa and removal of tariffs and barriers, which hindered free flow of goods and services across the continent. World Bank published a study on "*the openness of African skies - implementing the Yamoussoukro Decision*", which state that majority of the African states continue to impose restrictions on their airlines in order to safeguard their

state-owned carriers.⁴¹The continued restriction of airspace challenges realization of open skies policy in Africa.

One of the fundamental principles of liberalization of the air market is removal of the barriers on ownership of airlines. The YD encouraged competition among intra-African airlines with the aim of achieving liberalization of the air transport markets. Fair competition underpinned the open sky policy in Africa as espoused by the YD and for the effective implementation of the decision certain rules and procedures were to be followed. Competition between African airlines for African air market is an integral component of the YD which mandates member states to maintain fair competition and opportunities for the African airline. The African airlines are mandated to also improvise air transport services within their respective territories.

The main elements contained in the Yamoussoukro Decision entailed; “the granting to all state parties to the decision the free exercise of first, second, third, fourth, and fifth freedom rights on both scheduled and nonscheduled passenger and freight (cargo and mail) air services performed by an eligible airline.⁴² The granting of fifth freedom rights was initially limited in Article 3 by the possibility for a state to grant these rights only in specific circumstance”. Majority of African airlines have not attained fifth freedom rights in their respective civil aviation jurisdictions.

The implementation of the Yamoussoukro decision has fallen short of realizing its objectives. According to Charles Schlumberger, ten countries in Africa have not signed the ratification of the decision while many other countries which are not signatories have not

⁴¹ Schlumberger, C.E. 2010. *Open skies for Africa. Implementing the Yamoussoukro Decision*. Washington D.C

⁴² Ibid

implemented it. He asserts that; African countries are missing the historic opportunity due to failure to implement the YD. Further, Schlumberger opined that; “most African countries that have abandoned their ailing carriers and opened up to foreign operators, now have their air services, both passengers and freight, that are more efficient, safer and with more competitive prices”.⁴³

2.3 Non-ratification of the Abuja Treaty by some African States

The Abuja treaty legitimizes the existence of the YD through Article 10, which state that “the decisions of the Assembly of the AEC shall be binding on member states and organs of the community as well as on REC’s⁴⁴, where Members of the OAU signed the treaty in 1994. However, the YD has been marred by myriad of challenges due to the reluctance to ratify the Abuja treaty. Out of the 54 African states, ten states are considered as non-Abuja Treaty states. Eritrea and Morocco were among the first African states to sign the Abuja treaty, Djibouti, Gabon, Madagascar and Somali signed the treaty, but they did not ratify it, South Africa, Mauritania, Swaziland and Equatorial Guinea signed the treaty and also presented the ratification instruments. Non-treaty states are those states that never signed the treaty and therefore they are not members of the YD. Therefore, 44 African states become members of the treaty until its replacement on 12th August 2002 became state parties, also adhered to the Yamoussoukro decision. The other states cannot be considered to be parties to the Yamoussoukro Decision.

The states that are not party to the Yamoussoukro Decision are not bound to implement the stipulations of the binding decision. The implementation of the YD calls for the party states to regularly coordinate and harmonize aircraft technical operations, airworthiness, facilitation,

⁴³ Ibid

⁴⁴ Djibo, B. 2008. *Civil Aviation Issues in Africa*. Abuja: ICAO Air Transport Symposium/AFCAC

security and tariffs. The states that are not party to the YD can therefore not cooperate with the party states in such matters, which present a policy challenge to the civil aviation in the continent, which slows continental international trade. Since not all African states are party to the YD its full potential cannot be realized to unlock commercial opportunities for African Airlines.⁴⁵

2.4 Unfair Competition

The Yamoussoukro Decision formed a competition executing commission to facilitate fair competition for African air market. This was the AFCAC whose function was to ensure fair competition between African airlines. According to Article 7 of the decision; “state parties shall ensure fair opportunity on non-discriminatory basis for the designated African airline, to effectively compete in providing air transport services within their respective territory”.⁴⁶The main aim of the competition policy is to offer an avenue where states can compete fairly and not put any other actor in a disadvantage.

The regional implementation of the competitive air transport services in East Africa Community region was to be undertaken by a Joint Competitive Authority (JCA) within the EAC and the larger Common Market for East and South Africa (COMESA) and Southern Africa Development Community (SADC) regions. The JCA was started to ensure the competition policy is fully implemented in line with the YD objectives on air transport in the EAC, SADC and COMESA in 2009.⁴⁷

⁴⁵Gleeve, S.D. 2018. *Opening up Aviation Services in Africa*. Tunis: Infrastructure Consortium for Africa (ICA) C/O Africa Development Bank.

⁴⁶Article 7. AFCAP

⁴⁷Deloitte. 2018. *Single African Air Transport Market. Is Africa ready?* Nairobi: Deloitte Touche Tohmatsu

According to the Deloitte report issued in 2018, the operationalization and execution of JCA derailed due to lack of an active monitoring institution.⁴⁸ Lack of a competitive monitoring institution presents a policy challenge, which encourages unfair competition. In the East African Community, competition has been unfair due to the emergence of strong airlines from the Gulf region. These have taken over the markets that were previously serviced by the African airlines.⁴⁹ The problem results from national ownership of many Gulf carriers which are supported by state subsidies, benefiting from access to cheap airport infrastructure, fuel and capital comparative to costly African airliners. Generally, African's airlines are worried about these booming airlines from the Gulf, which have taken over the markets initially served by them especially if the ownership restrictions were relaxed.⁵⁰

To illustrate the importance of competition, this study offers the case of Ethiopia Airways merger. In 2017, the Ethiopian Airways merged with EAE to create a new national airline-EAG. This increased fair competition as well as improved airport services. The merger has created vibrancy in the airline industry with speculations of monopolistic tendencies being highlighted. Through the merger, Ethiopian Civil Aviation will have opened up the market to allow for a fifth freedom right.⁵¹ Given the large size, extensive air network and ownership of airlines in West Africa, East Africa and Southern Africa the national airlines present formidable competition to other airlines which could potentially ignite price wars.

Without comprehensive competition laws and regulations in place very few African countries will be able to enter into an open sky policy with Ethiopia. This is explained by the fear among the competitors of the undue advantages to the national airline attributed to concerns

⁴⁸ Ibid. p.20

⁴⁹ Ibid, p.20

⁵⁰Njoya, E.T. 2017. *Africa's single Aviation Market: The progress so far*. London: Sussex University Press

⁵¹Deloitte, 2018

regarding the protection of Ethiopia's national interest. Nigeria has raised concerns over the dominance of Ethiopian airlines, which threatens the survival of other national carriers in the EAC, SADC and ECOWAS regions. The fear is grounded on the lack of level playing ground for other national carriers brought by stiff price wars. The fact that customers will opt for cheaper options advantages from Ethiopia national carrier will ignite a gradual collapse of competitors resulting to domination and monopolization of the industry.

The above Ethiopian Airline case is similar to what happened to smaller airlines in the US following the Airline Deregulation Act in 1978. The deregulation led to huge changes in the aviation industry such as increase in costs of low carriers and breakdown of larger carries.⁵² Before the enactment of deregulation, airlines only competed on services while the government controlled the fares. Upon deregulation airline prices declined and passenger volumes increased due to entry of low-cost carriers. Deregulation increased competition, which reduced the airfares, and American aviation industry registered improved infrastructure, better equipment and markets. Although deregulation resulted to collapse of more than 160 US airlines since 1978, it led to the avoidance of unreasonable concentration, which could have allowed increase in prices.

2.5 Taxes and Charges

Just like air transport prices, taxes and charges levied on aviation services are different among majority of African countries. There is no uniform regime of charges and taxes, which apply to the African civil aviation as a policy. Liberalization of civil aviation in Africa has not led to decrease in tariffs because of lack of competition on most routes. The African airlines also lack harmonized taxes and charges with each sovereign state adopting different tax regimes.

⁵²Bento, M. 2015. Effects of the Airline Deregulation Act on Aeronautical Industry.-*International Journal of Advance Innovations, Thoughts & Ideas*, 11(1), 259-272

Some African countries are subsidized by their governments but still levy the full charge when they venture into foreign states. Specific states apply their own taxes derived from their sovereignty.

These taxes are double-edged; they could promote or harm the competitiveness of the civil aviation. Since the AFCAC has not been operationalized and become fully functional, majority of states have taken advantage of SAATM launched in 2018 to impose their tax regimes on all airlines. This would result into undue advantages to government owned carriers as they accrue taxation benefits which are not available to privately owned airlines. The SAATM has not provided a direction in adoption of uniform taxes or charges, which are to be applied to all the carriers. However, it has provided for applicable of “high charges” at some airports and “other restrictions inflicted to avoid competition to national airlines” as threat faced by airlines in the market.⁵³

According to YD Article 11, African airlines are granted “the right to request in accordance with the applicable foreign exchange regulations, to convert and remit to a country of its choice, all revenues from the sale of air transport services and associated activities directly linked to air transport in excess of sums locally disbursed”.⁵⁴ Conversion and remittance are allowed in relation to FER. However, the achievement of fair taxation has been a policy challenge given that most African countries still impose restrictions on FER.

⁵³The Single African Air Transport Market. Available at: www.tralac.org/documents/resources. Accessed on 26/9/2020

⁵⁴ Article 11, YD

2.6 Ownership and Control

According to Aviation industry rules, there exist ownership and control policies that guide the participants. The ownership and control policy were introduced by the Bermuda Agreement between the United Kingdom and the government of the United States relating to the regulation of their airline transport markets and services. Under Article 6, the Bermuda Agreement mandates contracting parties to ensure they manage and control the behavior of these airlines.⁵⁵ Additionally, under “Article 3(6) of the Bermuda II Agreement”, each contracting state is supposed to satisfy certain conditions among them; grant the appropriate operating authorizations and technical permission to an airline after being satisfied with ownership conditions which provides the ownership and controlling entity. Thus, according to the YD the carrier must be legitimate and owned by nationals of the country where it is registered. Also, the Nationals of the country should control it because this is one of the considerable factors which influence Africa’s open sky policy.

In particular, under the YD the condition of ownership is central to the liberalization process facilitating open skies policy in Africa. The Yamoussoukro Decision mandates the contracting states to ensure that majority of ownership and control of airlines is by national government and nationals of a contracting government. According to Njoya, majority of the African airlines are owned by the state, and air traffic growth witnessed is associated with the Low Cost Carriers (LCCs).⁵⁶Njoya cites ownership and issues of national ownership control among Africa’s civil aviation to be impediments to Africa’s open skies policy espoused by the YD. According to Njoya, one of the challenges confronting opening of African airlines is the

⁵⁵Article 6. Bermuda I Agreement

⁵⁶Njoya, E.T. 2016. *Africa’s Single Aviation Market: The Progress So Far*. Elsevier: University of Huddersfield.

issue of restrictions on ownership and control.⁵⁷ These restrictions hinder the African carriers from accessing the foreign capital or invest in foreign countries.

2.7 Other Factors that Impact YD

Other factors impacting on the implementation of the Yamoussoukro Decision include lack of cooperation among many African airlines, which led to unfair competition for small markets in some countries. Presence of thin routes in the African airline sector presents a major challenge, which limits airlines to operate in multiple destinations. Another challenge is lack of coordination and cooperation between weak and strong airlines. Apart from the case presented above of Kenya Airways and Ethiopian Airline which have sought alliances and cooperated with private partnerships, other African countries have not cooperated but rather have engaged in wasteful competition amongst airlines.

Corporate mergers, which entail combining airlines into one entity, present an economic opportunity and provide a solution to counter the challenges faced by the African airlines. Moreover, while regional grouping of airlines particularly in East Africa and other regional blocs is far from being achieved, Air Afrique established in 1961, constituting of 11 West African countries airlines, presented an historical merger of African airlines. This should have been strengthened through further commitment and research for the realization of its objectives.

2.8 Costly Air Fare (Expensive)

Air transport in Africa is expensive. It is common to find that majority of Africans have never stepped into an airplane. This is not because of absence of airplanes but related to the cost of flying. Majority of Africans cannot afford flight costs which further worsen the situation.

⁵⁷ Ibid

What is more surprising is that intra-Africa air travel is costly than travel outside the continent. For instance, a flight from Nairobi to Dubai will cost an average of USD 365 (KES 37, 255)⁵⁸ while traveling from Nairobi to Johannesburg which is 5-hour flight will cost USD 466 (KES 50, 339).⁵⁹ This makes intra-African Air transport expensive compared to other destinations. The emergence of low cost carriers has reduced airfare considerably, due to competition, which they have brought. In East Africa region, LCCs have set a modest price competition to challenge inappropriate cost structure.

2.9 Research findings

2.9.1 Response Rate

Out of the 100 respondents drawn from the research sample, 89 responded. This makes a response rate of 89%, which was deemed sufficient for analysis.

Table 2: Response Rate

	Frequency	Percent
Responded	89	89
Non-Responded	11	11
Total	100	100

Source: Resercher, 2021

2.9.2 Gender of Respondents

The researcher interviewed both genders. Most of the respondents were male (57.3%) while 42.7% female. It is thus evident that both genders were well represented in the study.

⁵⁸ Available online at; <https://www.kenya-airways.com/en-ke/flights-from-nairobi-to-dubai> Accessed on 17/2/2021

⁵⁹ Tripadvisor.com Nairobi to Johannesburg

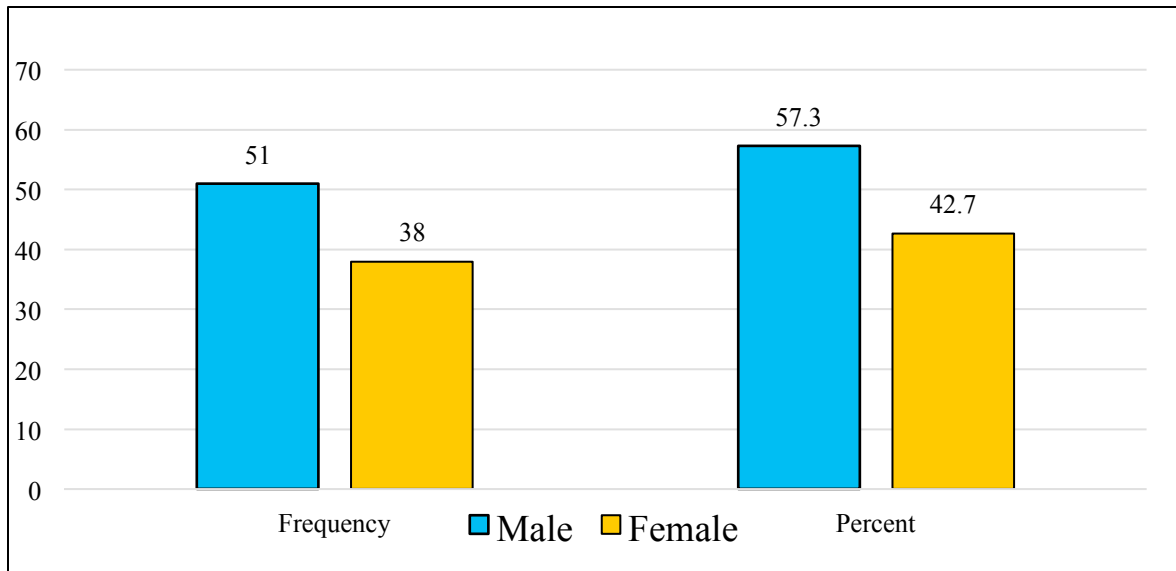


Figure 2: Gender of Respondents

(Source: field data from Author)

2. 9.3 Ages of Respondents

The figure 2.2 below presents the age for the participants who participated in this study. The findings show that most of the respondents were aged 26 to 50 years (42.7%). These were followed by those aged between 18 and 35 years at 37.1%. The least, about one fifth (20.2%) were aged between 51 and 65 years. This shows that the respondents were from divergent age groups. This could mitigate age bias.

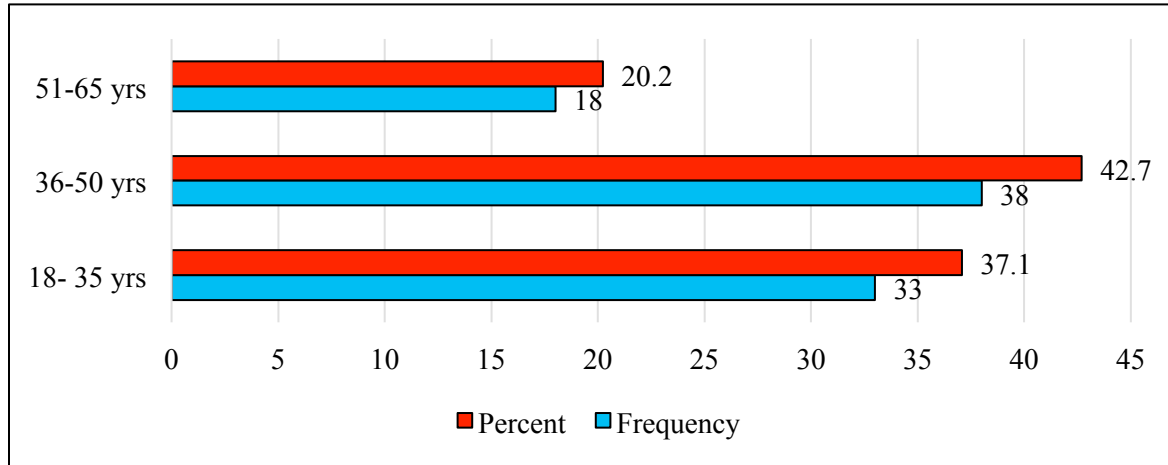


Figure 3: Ages of Respondents

(Source: field data from Author)

2.9.4 Education Levels of Respondents

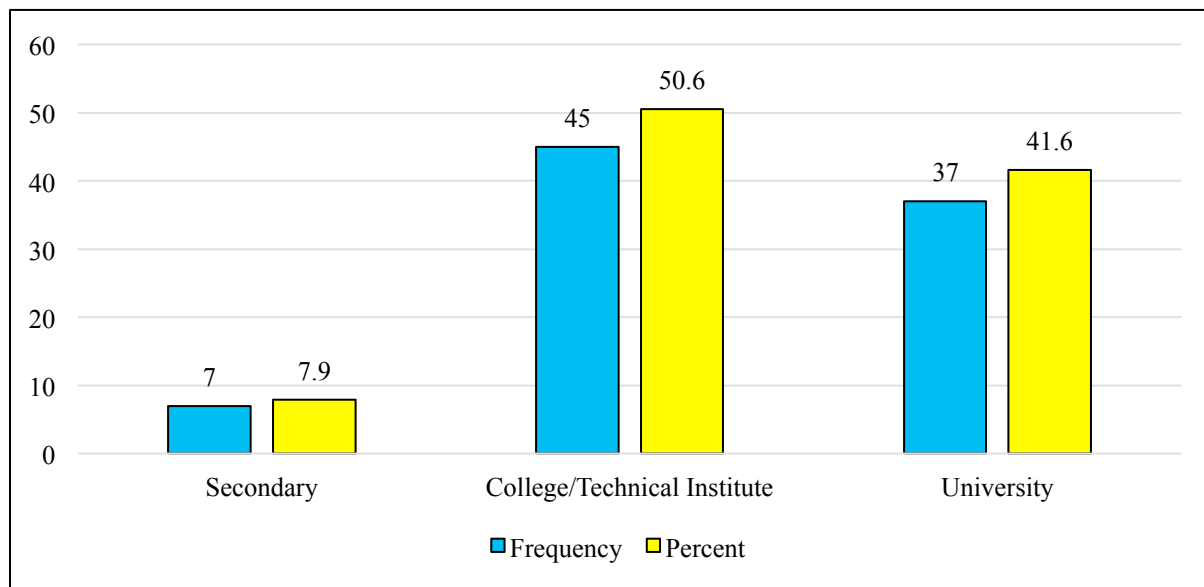


Figure 4: Education Levels of Respondents

(Source: field data from author)

The study also sought to find out the education levels of the respondents. The findings are presented in Figure 2.3. When asked about their education levels, slightly more than half of the respondents (50.6%) pointed out that they had college or technical institute qualifications. These

were followed by 41.6% who had university degrees. The least had secondary level education (7.9%). The respondents were thus from different levels of education and could make significant contributions to the subject under investigation.

2. 9.5 Involvement in National Civil Aviation

The study sought to find out the role, which best describes the respondents’ involvement in national Civil Aviation as shown in Figure 2.4. The findings show that all departments were well presented. The least were either Ministry of Transport staff or Intra Business Persons at 19.1%. Most of the respondents were officials from KCAA, Wilson Airport as well as JKIA Flight and Cabin Crew. All the various categories of respondents were well presented in the study.

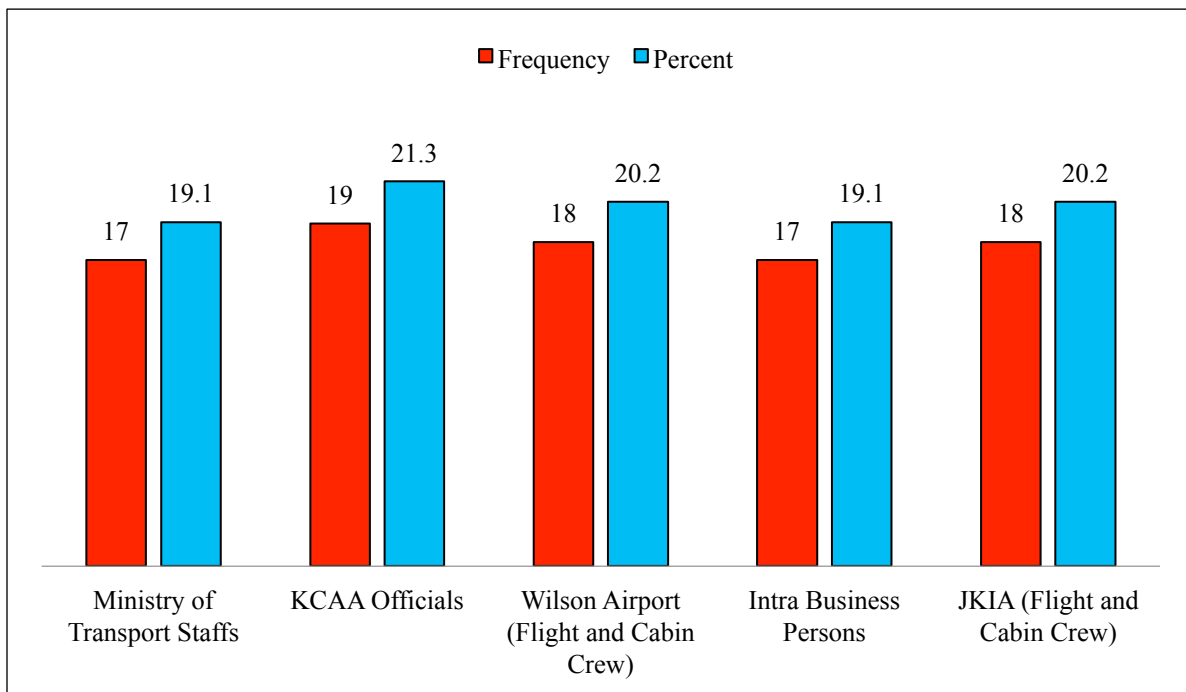


Figure 5: *Involvement in National Civil Aviation*

Source; (Field Data from Author)

2.10 Findings on the Implementation of the Yamoussoukro Decision

When the respondents were asked on the underlying factors influencing implementation of the Yamoussoukro Decision. The majority of the respondents said that Kenya had an approved national civil aviation policy (67%). They however, said that they did not describe their country as compliant to Yamoussoukro decision (68%) as shown on Table 2.1.

The respondents also said that the country had a written national civil aviation security programme (72%). This could enhance connectivity in the African countries.⁶⁰The respondents said that the state had not developed national action plan to ensure compliance with Yamoussoukro decision (55%). They also described Kenya as not being an Open sky (67%). This could affect the realization of objectives of open sky policies.⁶¹They also pointed out that most countries were not committed to realizing the YD (72%). This could hamper enhanced connectivity in the African countries.⁶² However, they agreed (Means=4) that there was adequate corporate support for implementing and maintaining a positive safety aviation culture as per the IATA guidelines in my organization and that air transport in the country was open to all commercial airlines around the world. Although Kenya had put into place some measures aimed at implemented the YD, the country was yet far from maximally implementing the agreement. This could be due to lack of complete agenda on the implementation of open skies agreements.⁶³

⁶⁰Higgoda, R. and Madurapperuma, M.W. (2019) Dynamic Nexus between Air-Transportation and Economic Growth: A Systematic Literature Review. *Journal of Transportation Technologies*, 9, 156-170.

⁶¹Schlumberger, C.E. 2010. *Open skies for Africa. Implementing the Yamoussoukro Decision*. Washington D.C

⁶²Higgoda, R. and Madurapperuma, M.W. (2019) Dynamic Nexus between Air-Transportation and Economic Growth: A Systematic Literature Review. *Journal of Transportation Technologies*, 9, 156-170.

⁶³Njoya, E.T. (2016). *Africa's Single Aviation Market: The Progress So Far*. Elsevier: University of Huddersfield.

Table 2: Selected Questions Regarding Implementation of the Yamoussoukro Decision

Statement	Yes	No
a) Does your country have an approved national civil aviation policy?	67	22
b) Can you describe your country as compliant to Yamoussoukro decision?	21	68
c) Does your Country have a written national civil aviation security programme?	72	17
d) Has your state developed national action plan to ensure compliance with Yamoussoukro decision?	34	55
e) Can you describe your country as an open sky?	22	67
f) Are the countries in Africa committed to realizing the YD?	17	72

(Source: field data from author)

2.11 Chapter Conclusion

Chapter two sought to establish factors influencing the implementation of the Yamoussoukro Decision (YD). The chapter established various factors, which are responsible for the successful implementation of YD in pursuit for Africa's open skies policy. Whereas, the factors are premised at institutional level, they are reflected at national level and they all influence the attainment of Africa open skies. These factors include non-ratification of the Abuja Treaty which makes some African Airlines non-committal to the YD stipulations, unfair competition among intra-African carriers, taxes and charges among African airlines constitute a policy constraint influencing the implementation of the YD. Other factors integral to open skies

policy in Africa entail ownership and control of airlines. Issues related to ownership and control of African airlines remains a central component integral to the realization of fair competition and compliant to the stipulations of the YD. Other factors influencing the implementation of YD include the cost of air travel and lack of cooperation, which results into airline mergers with increased commercial viability.

CHAPTER THREE

CHALLENGES CONFRONTING KENYA'S CIVIL AVIATION IN THE REALIZATION OF THE YAMOOUSSOUKRO DECISION

3.1 Introduction

This chapter presents the policy challenges facing the aviation industry in Kenya in implementation of the Yamoussoukro decision. It explores the forces shaping the future of aviation and the potential implications on the YD in realizing that challenges are always on the horizon and it is always hard to find an industry, which has never been knocked sideways by unnoticed development and changes.

3.2 Air Safety Record Challenges

Air transport is considered one of the safest means of transport. However, this does not mean that there are no records of fatalities as airlines are prone to accidents and faces many risk caused by various emergencies. These accidents have adverse effects on the physical health of the victims, environment and on social-economic growth.⁶⁴ According to the Kenya Aviation Safety Network, Kenya has recorded 96 fatal accidents accounting for 306 fatalities between 2006 and 2009.⁶⁵ A study done by Mutugi and Maingi revealed that Kenya had witnessed a number of fatal aviation disasters, which have worsened her global aviation rating.⁶⁶ These include; “the Busia (24th January 2003), Marsabit (10th April 2006), Narok (14th June 2008) and Ngong (10th June 2012)” plane disasters. These have claimed lives of dozens of powerful











⁶⁴Kanyi, P.M., Kamau, P.K., & Mireri, C. (2016). Assessment of security preparedness and adherence to international civil aviation standards at Wilson Airport, Nairobi, Kenya. Nairobi. *Journal Of Humanities And Social Science (IOSR-JHSS)*, 21 (6), 23-41

⁶⁵Flight Safety Foundation. (2017). FAA Announces Aviation safety rating for Kenya. Available at: <https://news.aviation-safety.net/2017/02/27/faa-announces-aviation-safety-rating-kenya/> Accessed on 8.10/2020

⁶⁶Mutugi, M.W., & Maingi, S.G. (2011). Disasters in Kenya. A major public health Concern. *Journal of Public Health and Epidemiology*, 3(1), 38-42

individuals in the government, cabin crews, civil servants and passengers. The list below shows the latest air mishaps according to Air Safety Network:⁶⁷

Figure 6: Air Mishaps

Kenya- Accident & incidents:							
99 occurrences in the ASN safety database, showing occurrence 1 - 10							
date	type	registration	operator	fat.	location	pic	cat
26-MAR-2021	Beech B200 Super King Air	5Y-NJS	Unknown	0	Nairobi		A1
20-MAR-2021	Cessna 208B Grand Caravan	5Y-JKN	Aeronav Air Services	2	Marsabit		A1
12-JAN-2021	Harbin Y-12-II		Kenyan AF	4	near Voi		A1
11-SEP-2020	Cessna 208B Grand Caravan	5Y-CDH ?	Unknown	0	Maji Moto ar...		A1
05-JAN-2020	Beech B300 King Air 350		L3 Technologies	2	Manda Bay-Ca...		C1
11-OCT-2019	Fokker 50	5Y-IZO	Silverstone Air Services	0	near Nairobi-Wils...		A1
16-AUG-2019	DHC-8-200	5Y-SLM	SafariLink	0	Kichwa Tembo...		A2
11-JUN-2019	CASA C-212 Aviocar 200	N603AR	EP Aviation	0	Kiunga Airpo...		A2
09-FEB-2019	Embraer ERJ 190AR (ERJ-190-100 IGW)	5Y-FFF	Kenya Airways	0	Nairobi-Jomo...		O2
09-FEB-2019	Embraer ERJ 190AR (ERJ-190-100 IGW)	5Y-KYR	Kenya Airways	0	Nairobi-Jomo...		O2

Source: Aviation Safety Network

The US Federal Aviation Administration (FAA) reported that; Kenya had complied with the international safety standards in regard to the February 2017 FAA assessment.⁶⁸ Apart from the impressive ranking, Kenya has experienced a series of accidents for the past few years largely caused by poor weather, mechanical problems among other factors. It's estimated that, there were 28 reported incidents and accidents, which were recorded in 2018-2019, which meant that there were aircrafts accidents or incidents every month.⁶⁹ Increase in the number of casualties

⁶⁷Aviation Safety Network. (2021). Kenya air safety profile. Available at <https://aviationsafety.net/database/country/country.php?id=5Y> Accessed on 9/10/2020

⁶⁸ Ibid,

⁶⁹The East African. (2019). Passengers no longer at ease as aircraft accidents surge. Nairobi. The Saturday, EastAfrican, Nov. 2nd 2019 Available at: <https://www.theeastafrican.co.ke/tea/news/east-africa/passengers-no-longer-at-ease-as-aircraft-accidents-surge> Accessed on 10/8/2020

has led to questions and calls for increased quality of inspections and the enforcement of laws regarding the maintenance of aircrafts and acquisition of air services licenses.

The Kenyan aviation industry is at position 67 on air safety globally and is ranked the 7th position in Africa.⁷⁰ However, the increase in number of accidents and incidents caused majorly by light aircrafts and helicopters still pose a challenge to the aviation industry.⁷¹ Layton, posit that the aviation is perceived as the safest means of transport globally however, it's still challenged by increased number of accidents which have adverse impacts.⁷² The Kenyan aviation industry have witnessed increased number of accidents and this has forced the KAI regulator (KCAA) to institute safety monitoring for the air industry in the country upon being summoned by the Kenyan parliament to explain on the rising incidents of accidents in the aviation sector. Safety is a policy concern, which the regulator (KCAA) must pay attention to all the time. Improving the aviation safety has been a top priority challenge and changing the air safety record in the country remains a policy issue worth civil aviation attention.

3.3 Aircraft Noise Challenge

Noise has remained to be an environmental policy issue confronting aviation which is also a great public concern. According to the national and WHO noise guidelines, noise levels are considered in terms of the acceptability to various receptors that in turn are driven by the land use practices.⁷³ Residential areas, learning facilities, religious areas, health facilities, recreation areas, working areas and others, have different exposure levels and hence varying

⁷⁰ Op cit,

⁷¹ Mwikya, N.K., & Mulwa S.A. (2018). *Implementation of Aviation safety standards and performance of air transport industry: A conceptual Perspective*. Nairobi. University of Nairobi. Vol.4 Issue 2. Pp.20-33

⁷² Layton, G. (2012). Aviation Safety: Comparing National and Regional Governmental Regulatory Commercial Oversight Affiliations. *International Journal of Business and Social Science*, 3 (3), 83-88.

⁷³ KCAA. (2019). *Airspace master Plan (2015-2030): Strategic Environmental Assessment (SEA)*. Nairobi: Draft SEA Report by Aquaclean Services Ltd.

incompatibility. Noise and vibrations from aircrafts is a significant challenge which affects social and economic land use activities on the ground. Noise and vibrations from aircrafts has a significant influence on migratory and breeding zones of birds.

According to Ornithology department at the Museums of Kenya, aircraft movement corridors in space has a potential direct impact on birds migratory routes at both international and regional levels, where noise and vibration affects bird's habitats and breeding areas.⁷⁴ The noise and vibration challenge is associated with public health concerns which relate to loss of sleep, trauma and hearing impairment for residents within the aviation operations areas presenting a policy challenge to the KCAA and the NEMA.

3.4 Technological Advancement Regulation Challenge

Due to technological advancement, various sectors are increasingly demanding the services of drones. Sectors which have adopted the use of drones include land survey services, medical services sector, photography (shooting of videos), agriculture and investigative services. There exists no policy framework regulating the use of drones in the country. The policy challenge rests with the KCAA for it has not developed policy guidelines on the use of drones in the country's airspace. The absence of a regulatory framework governing the use of drones in Kenya implies a potential risk to national security, public privacy and conflicts with other social issues. Other technological advancements are those related to tourism sector where hot air balloons are used for parks movements. Like the drones, balloons used for tourism navigation are not regulated by the KCAA, which makes their usage a safety concern for aviation industry.

⁷⁴ Ibid, p.62

3.5 Land use challenges

Land use challenge is attributed to encroachment arising from uncontrolled settlement around airports area effectively causing insecurity and violating ICAO guidelines. Since airports employ thousands of people and are linked to other auxiliary business-like schools, hospitals, supermarkets and other amenities, which make people, tend to settle and reside in close proximity to them. These attract more residents near airports. Real estate development has mushroomed near airports, resulting to increased population and road traffic. In the event of aviation-related disaster, the people residing near airports are directly impacted thus posing enormous risk and dangers to the immediate precincts adjoining airports. According to Mukaria, this often results to good land planning needs being overlooked.⁷⁵ Inadequate land planning can impose high costs on the aviation industry as well as led to physical health problems, environmental problems and derail economic growth and development. A study done on Wilson Airport by KAAO revealed that, infringement on the aviation land presents a threat to the security of the industry. The Wilson Airport has been warned by KAAO on the danger posed by encroachment of the land by civilians who have built residential apartments, which block visibility of the flight paths when landing and taking off especially in bad weather.⁷⁶

3.6 Analysis of the Responses from the Questionnaire

To begin with, the respondents were presented with the statement, “In your opinion what is the most outstanding challenge confronting the Kenya Civil Aviation Authority in liberalizing civil aviation in the country?” The findings show that KCAA was faced with challenges including but not limited to lack of synchronized policies with other countries. There is also lack of

⁷⁵Mukaria, S.M (2013). *Knowledge, awareness and conformity to International Airport emergency preparedness standards: the case of Wilson Airport in Nairobi, Kenya. Published Thesis.* Nairobi: University of Nairobi.

⁷⁶KCCA. (2007). *Rules of the air and air traffic control regulations.* Nairobi: Kenya Civil aviation Authority

domestication of all provisions of the YD. Kenya also lacks the financial and technical knowhow to fully liberalize the civil authority as recommended by Michael Gill elsewhere.⁷⁷ In addition, Kenya faces excessive competition from other national carriers. This could affect the open skies policy as pointed out by Dimitriou and Sartzetaki.⁷⁸

The respondents were also asked to point out which aspect of civil aviation, according to their knowledge and experience, was critical for ensuring Air transport safety and compliance with international best practices. The findings show that the main aspects were technical capacity, financing and international cooperation with other countries. There was also need for political will to ensure the domestication of international declarations and agreements. These findings agree with those of Michael Gill (2018) who said that 13% of the world's population lacked adequate air transport infrastructure and technical capacity.⁷⁹

The respondents were posed with the question, “in your opinion how the national civil aviation safety has affected intra-African trade facilitation.” The findings show that air worthiness of the Kenya's aircraft, sufficiency of the aviation infrastructure as well as national security arrangements affected intra-African trade facilitation. Terror threats for example affected the appeal of Kenya's skies to international carriers especially during periods of excessive terror threat. This went on to affect trade with other countries.

The respondents were asked to point out their opinion on liberalizing Air transport in Africa. They said that most African countries were wary of stiff competition from rival airlines and thus placed many limitations on other countries. This agrees with Pederson who was of the same

⁷⁷Michael Gill. (2018). Air Transport Action Group. Aviation Beyond Borders

⁷⁸Dimitriou, D and Sartzetaki M. (2018) Assessing Air Transport Socio-Economic Footprint. *International Journal of Transportation Science and Technology*, 7, 283-290.

⁷⁹Michael Gill. (2018). Air Transport Action Group. AVIATION BEYOND BORDERS

opinion.⁸⁰ There is thus a need to ensure close cooperation among the various Africa countries to deal with the challenges affecting air transport liberalization.

3.7 Chapter Summary

This chapter discussed and established a number of challenges linked to aviation sector in the country. These challenges are rooted in policy and its implementation and greatly influence the realization of Africa open skies. The Kenyan airspace safety record is not impressive comparative to global standards. The frequency of air accidents in the Kenyan airspace is a challenge that Kenya Civil Aviation Authority should check for a safer and liberalized open skies, which adheres to the Yamoussoukro Decision. The noise challenge is an environmental challenge, which threatens people's health and challenges safety standards espoused by the YD. Lack of regulation on the part of drones, and absence of a legal framework in the country presents a technological challenge that needs policy intervention. The changes in land use policy particularly on the land adjacent to the airports and aircraft routes pose a danger to both individual safety and national security. Encroachment on aircraft landing and take-off zones presents a safety challenge and a development challenge to the aviation sector.

⁸⁰Pederson, P.O. (2000) The Changing Structure of Transport under Trade Liberalization and Globalization and its Impact on African Development, CDR working paper, Center for Development, Denmark

CHAPTER FOUR

FACTORS INFLUENCING THE SAFER SKIES POLICY IN KENYA

4.1 Introduction

This chapter presents the factors influencing the achievement of a safe aviation performance in Kenya. It reviews the accidents statistics, safety reports relating to Kenya's aviation sector, reports from accidents investigations as well as safety training practice. Safety in this chapter is regarded as the freedom of unacceptable risk, where the risk is the summation of probability of occurrence of harm and the severity of harm.

4.2 Air Safety Performance in Kenya

According to Nyaga, air safety performance can be understood to describe a number of elements which include accident statistics, operator's safety, safety of equipment and measures thereof, safety training and evaluation.⁸¹ Referring to Nyaga's definition safety performance entails all activities which increase or decrease the occurrence of a harmful risk. According to a study by Kimotho, in "investigating the factors influencing air safety performance in Kenya utilizing a case study of Kenya Airways revealed that there was a positive significant relationship between implementation of the air safety curriculum and air safety performance".⁸² The study further revealed that there was a positive significant relationship between capacity of instructors and airline safety performance.⁸³ Similarly, a 2019 report of the ICAO revealed that Kenya's air safety record was commendable with a score of 78 per cent.⁸⁴ This signifies a positive air safety

⁸¹Nyaga J. N (2008). *Factors Affecting the Successful Implementation of Safety Management Systems in the Aviation Industry in Kenya*, School of Economics, Moi University, Nairobi, Kenya

⁸²Kimotho, F. (2016). *Factors Influencing Air Safety Performance In Kenya: A Case Of Kenya Airways Limited In Nairobi County*. Nairobi. University of Nairobi Press

⁸³ Ibid, Abstract

⁸⁴ICAO. 2020. *Safety Report*. Montreal-Canada. International Civil Aviation Organization

performance in Kenya compared to other global states. Finally, the study revealed there was a significant relationship between current training and airline safety performance.⁸⁵ According to the safety report published by ICAO in 2020, from 2018 to 2019, there was a 16 per cent increase in the total number of accidents, as reported by global States.⁸⁶ The global accident rate of 2.9 accidents per million departures also increased by 12% in 2018 mostly involving planes with a certified TOW of over 5,700 kilograms.⁸⁷ While the global statistics appear grim, the Kenya's civil aviation safety record appears "commendable".

Pursuant to the provisions of regulation 54(1) of the Civil Aviation (Security) regulations, 2020, every operator is required to notify the KCAA of any safety related concerns, especially where law is violated.⁸⁸ This has led to reduction in Airlines fatalities.⁸⁹

4.3 Air Safety Training

Air safety training is considered to be a very important component as far as air safety performance is concerned. Cabin safety constitutes the integral component of air safety which requires inclusion in the overall civil aviation safety considerations. Cabin safety safeguards the security of all individuals in a flight and should be guaranteed before a flight takes off.⁹⁰ The cabin crew evacuates all passengers in a flight in case of any emergencies or accidents. This role played by the cabin crew has helped to reduce fatalities which result from accidents as provided by the GASP, Doc 10004 as it ensures passenger safety. Safety performance is therefore dependent on the cabin safety considerations, which is integral in informing any emergencies and

⁸⁵ Ibid

⁸⁶ ICAO. (2020). Safety Report. Montreal Canada. ICAO Publication, 2020 Edition

⁸⁷ Ibid, Executive Summary

⁸⁸ KCAA. (2021). Reporting of Security Incidents. Available online at; <https://www.kcaa.or.ke/safety-%26-security-oversight/aviation-security/reporting-of-security-incidents> Accessed on 2/17/2021

⁸⁹ Ibid

⁹⁰ ICAO. (2021). Information about ICAO's cabin safety initiatives can be found at www.icao.int/cabinsafety Accessed on 17/2/2021

new developments in the aircraft such as issues of pressure, engine problems among others as well as preventing the passengers from touching sensitive areas which might compromise their safety.⁹¹

As Kimotho posits implementation of air safety training and curriculum influences air safety performance.⁹² This is demonstrated by the air safety training offered by Kenya Airways. Kimotho asserts that air safety management trainings offered by KQ are consistent and standardized, trainings offered on air safety management and are relevant to the training objectives a factor which has facilitated a commendable air safety record in Kenya. The study also concludes that, the air safety performance is influenced by management support for training and points out that employees at Kenya Airways are adequately trained in emergency procedures supplemented by re-current training. These are responsible for the current safety record in the country. This positive air safety record is projected to grow Kenya's aviation sector's income by 249 per cent for the next twenty years contributing USD 11.3 billion to Kenya's GDP and supporting an estimated 859,000 jobs by 2037.⁹³ Apart from the air transport safety training ICAO identified some SSCs in other important sectors.

4.4 Status of Security Area

The establishment of a security area constitutes a key cornerstone area of effective aviation security. For the establishment of a baseline security area, five security areas are identified which include air operations area, secure area, Security Identification Display Area (SIDA), sterile area

⁹¹ Ibid

⁹² Ibid

⁹³ IATA. (2019). *Value of Aviation Report for Kenya*. Nairobi. IATA's Regional Aviation Forum hosted by Kenya Airways

and exclusive area.⁹⁴Schober *et al* explained the present and potential security threats posed to civil aviation and revealed that inflight security begins on the ground.⁹⁵ Ensuring the safety of an aircraft, the crew and all on board is the priority concern of a security area in a given civil aviation jurisdiction.

Further, Demichela and Tamasi assert that the 9/11 terrorist attacks in the US revolutionized aviation security in the world with emerging strategies characterized by the introduction of new-adaptive and innovative methods and procedures for improving aviation security.⁹⁶ According to them, the industry has developed new approaches which will prevent hijacking of aircrafts as well as safeguard their safety.⁹⁷ These strategies will help in enhancing security at the airport and prevent it from new threats, which block visibility especially when the airlines are landing or taking off.⁹⁸

Pursuant to the Civil Aviation Act No. 21 of 2013 which states that, “security regulations act of unlawful interference means an act or attempted act to jeopardize the safety of civil aviation and air transport, which among other acts include unlawful seizure of an aircraft in flight or on the ground, hostage taking on board an aircraft, forcible intrusion on board an aircraft at an airport or on the premises of an aeronautical facility”. According to a study done by Mireri, Kamau and Kanyi on the security safety and adherence to civil aviation standards at Wilson Airport found out that at the entry points, the gates are not well manned together with entry doors to the main buildings.⁹⁹ This jeopardizes security safety in the airport coupled with presence of untrained

⁹⁴Mireri, C., Kanyi, P.M., Kamau, P.K. (2016). Assessment of the security preparedness and adherence to International Civil Aviation Standards at Wilson Airport, Kenya. Nairobi. *IOSR Journal of Humanities and Social Science (IOSR-JHSS) Volume 21, Issue 6, Ver. 3*

⁹⁵Schober, T., Koble, I., Szabo, S. (2012). Present and potential threats posed to Civil Aviation. Slovakia. Technical University of Košice

⁹⁶Demichela, M., Tamasi, G. (2011). Risk Assessment Techniques for Civil Aviation Security. Rome. Elsevier

⁹⁷ Ibid

⁹⁸ Ibid

⁹⁹ Ibid

security personnel. Further, the ICAO standards and guidelines were not adhered and there was incessant violations of codes and ethics, for instance, non-authorized personnel had access to areas that only staffs were allowed.¹⁰⁰ In another study done by Odhiambo, profiling of passengers is a growing technique within the global aviation industry, especially in the developed countries, which has been seen to diminish risk of the threats to aircrafts.¹⁰¹ Passenger profiling which is a proactive measure of safety actively propagates for prevention of crimes prior to their occurrence, hence reducing costs together with complications and assisting in designing improved safety processes.¹⁰² This is explained as the process of using behavioral evidence to infer future actions of offenders, including their personality characteristics and psychopathology of the perpetrators, assuming that offenders have consistent behavioral traits which can be identified and captured for future apprehension.¹⁰³ Therefore, improving the security status of the aerodromes, airplane and personnel from risks associated with aviation sector is a factor to be considered when securing the sector in Kenya.

4.5 Competition

Competition is a factor influencing the safety of civil aviation in the country. As a result of heightened competition by the entry of private operators has improved the security status of local and international carriers. A competition policy provides an avenue for economic actors to trade and compete fairly without disadvantaging each other. According to Article 7 of the Africa Civil Aviation Commission established by the Yamoussoukro Decision, competition is emphasized as a worthwhile factor for states to consider as it increases fair opportunity and fosters non-

¹⁰⁰Op cit.

¹⁰¹Odhiambo, C. (2019). Use of Passenger Profiling to enhance Aviation Security in Kenya. Nairobi. United States International University Press

¹⁰² Ibid

¹⁰³Turvey, B. (2011). Criminal Profiling - 4th Edition. Krieger Academic Press.

discrimination. According to article 7 of the YD, “State Parties shall ensure fair opportunity on non-discriminatory basis for the designated African airline, to effectively compete in providing air transport services within their respective territory.”¹⁰⁴

Aviation competition has seen invasion of local air market by world re-known airlines which have intensified stiff competition and improved their operations, including security features to attract customers. The African continent have been infiltrated by foreign mega carriers such as “British Airways, KLM, Air France, and Lufthansa.” These have taken over the international traffic leaving very little space for the small African airlines.¹⁰⁵ Thus leading to stiff competitions between the airlines. On the positive side, such competition has resulted into improved customer service and heightened security consideration. As Jumi asserts, the immense growth witnessed in the domestic airlines in Kenya is necessitated by enhanced competitions from other regional and international carriers.¹⁰⁶ By the end of 2020, there were about 570 aerodromes in Kenya, nine (9) of which are managed directly by the KAA and were collectively viable and represented over 95% of the commercial activities in the airport related business.¹⁰⁷

4.6 Personnel Licensing Regulations

Personnel licensing regulations constitutes a key factor in fostering the growth of the domestic airline industry in Kenya and a safer one for that particular reason. According to Civil Aviation (Personnel Licensing) No.21 of 2013 the personnel licensing role is concerned with the aircraft registration, aviation personnel licensing, surveillance and ATO certification. Under the Civil

¹⁰⁴Article 7. Africa Civil Aviation Commission

¹⁰⁵Irandu, E. (2008). Opening African Skies: The Case of Airline Industry Liberalization in East Africa. Source: *Journal of the Transportation Research Forum*, Vol. 47, No. 1 (Spring 2008), pp. 73-88 Published by: Transportation Research Forum

¹⁰⁶Jumi, E.P. (2019). The Effect of Civil Aviation regulations on the growth of the domestic Airline Industry in Kenya. Nairobi. Strathmore University

¹⁰⁷Chesire, C.R. (2015). Strategy Implementation Challenges Faced By Kenya Civil Aviation Authority In Regulating Aviation Training Institutions. Nairobi. University of Nairobi.

Aviation Act (2013); legal notice 95 of 2018 lays the guidelines for personnel licensing within domestic airline firms in Kenya. Personnel licensing focuses on the licensing and certification, training and testing as well as the rating and authorization of personnel within the aviation sector. A study conducted by Njeru, in 2015 examined the factors that influence safety in aviation firms utilizing the case of Kenya Civil Aviation Authority.¹⁰⁸ The results of the study showed that, concentration of professional staff influenced the growth of the industry. Within KCAA the researcher indicated, there were poor recruitment and retention policies, ageing personnel and poor staff development which resulted in poor aviation safety within the industry. The issue of licensing was riddled with corruption a factor which substantially compromised the safety of aviation industry.

The Civil Aviation Act clearly stipulates that “a holder of a pilot license who has attained the age of 65 years shall not act as a pilot of an aircraft engaged in commercial air transport operations”.¹⁰⁹ Whereas job experience comes with age, much advanced age is not recommended for aircraft navigation, due to safety considerations. According to Njeru, there is need to consider competent and qualified personnel in the aviation industry.¹¹⁰ The study further revealed that, the KCAA lacked qualified human resources to ensure safety and monitor operations in the industry. The study further concluded that, its paramount to consider personnel professional licensing and qualifications which are very vital in ensuring safety in the aviation industry and also due to the fact that, technology keep on evolving and there are other emerging issues that affect the industry.¹¹¹ Therefore, the recruitment process should consider these factors as they are instrumental in enhancing safety of other workers as well as that of the passengers. Proper

¹⁰⁸Njeru, E. W. (2015). Factors Influencing Aviation Safety: The Case of Kenya Civil Aviation Authority. Unpublished Master of Arts Degree in Project Planning and Management, University of Nairobi.

¹⁰⁹Article 15(4). Civil Aviation Act, 2018

¹¹⁰ Ibid

¹¹¹ Ibid

licensing coupled with retention and personnel constant training constitutes an integral component of civil aviation safety which forms part of the general aviation security enshrined in the Yamoussoukro Decision.

4.7 Responses from the Findings

According to the respondents, 67% described Kenya as not being an Open sky and this could affect the realization of objectives of open skies policies.¹¹² When asked if there were national carriers denied entry into Kenya's Airspace, 6% of the respondents said yes. This was mostly during the COVID-19 period or during stints of diplomatic standoff as was the case with case of Somalia due to disputes on the Indian Ocean international border. The respondents were also asked if there was a country in Africa where Kenya national carrier is denied entry. The findings show that 2% of the respondents were of that opinion. When asked to explain their responses, the respondents said that during diplomatic tussles especially during the COVID-19 period, Kenya was denied entry into Tanzania. They also pointed out Personnel licensing regulations, competition among the local airlines and the international ones, air safety training as well as the status of security area among some of the integral factors influencing the safety of civil aviation.

4.8 Chapter Summary

This chapter sought to establish the factors responsible for the safety of the Kenya's civil aviation sector. The chapter reviewed global civil aviation accidents statistics to estimate the status of Kenya's civil aviation which has been labeled as commendable given the minimal number of aviation accidents. This is reinforced by the attainment of a score of 78 per cent issued by the ICAO signifying the safety of Kenya's civil aviation open skies policy. A number of factors have contributed to the attainment of such a score among them includes "air safety

¹¹²Schlumberger, C.E. 2010. *Open skies for Africa. Implementing the Yamoussoukro Decision*. Washington D.C

training which entailed cabin safety training and the prevention of accidents and incidents, the protection of the aircraft's occupants through proactive safety management including hazard identification and safety risk management, and the increase of survivability in the event of an emergency situation”.

The status of security area identified in the aviation field is an integral factor influencing the safety of civil aviation. This involves the airport safety zones which should be marked and protected to avoid encroachment by civilians. This chapter has established that heightened competition among the local airlines and the international ones improved security features which attracted customer satisfaction and improved the overall aviation security structure. Personnel licensing has been identified as a key factor influencing the safety of civil aviation owing to the professionalism, experience and dynamism associated with aviation in a rapidly globalizing world driven by technology. Whereas these are not the only factors, they constitute the major elements responsible for achieving the safety of civil aviation.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings established based on the research objectives outlined in chapter one. The findings are guided by the general study objective, which was to determine perceived influence of African civil aviation on international trade. Specifically, the study sought to determine underlying factors influencing implementation of the Yamoussoukro Decision, to establish policy challenges confronting Kenya's civil aviation in the realization of the Yamoussoukro Decision and to determine factors influencing full implementation of the safer skies policy in Kenya given benefits on air transport, economy and international trade. This chapter ends with a conclusion and recommendations for achieving a safe and secure oversight regime capable of facilitating international trade.

5.2 Summary of Findings

The following section presents the summaries of the findings obtained. This is done in line with the study objectives.

5.2.1 Factors Influencing the Implementation of the Yamoussoukro Decision

The first objective of the study was "to determine underlying factors influencing implementation of the Yamoussoukro Decision". Data was collected from various primary and secondary sources. The findings obtained show that, there are several factors, which hamper and influence Africa's liberalization of air services. The factors range from policy, institutional and governance factors. Majority of African states have continued to restrict their air services market, a factor that has hampered international trade as well as challenged the realization of open skies policy in

Africa. The YD provided an avenue for liberalization of the air transport markets by allowing fair competition between countries, however it has failed to achieve its objectives because some of the African countries have been reluctant to sign and implement the decision. Consequently, some African states also failed to sign and ratify the Abuja treaty which is part of the YD that calls for the party states to regularly coordinate and harmonize aircraft technical operations, airworthiness, facilitation, security and tariffs. Failure of some states to cooperate with other states in signing of the treaties has posed a policy challenge to the civil aviation as affirmed by 68% of the respondents who participated in the study.

Further, unfair competition from booming international airlines such as Gulf carriers in EAC markets and lack of a competitive monitoring institution present a challenge to the liberalization of the air transport markets. For instance, it has become a challenge for other African countries to join the open skies policy with Ethiopia after it created a new national airline-Ethiopian Airlines Group due to lack of a comprehensive competition laws and regulations. Fair competition led to reduction of prices on goods and services as well as improved infrastructure, better equipment and markets in the aviation industry as agreed by majority of the respondents. Another factor is lack of a uniform regime of charges and taxes which apply to the African civil aviation policy. There is no harmonization of tax charges on aviation services in many African countries as each state applies its own taxes derived from its sovereignty. This limits liberation of air services and hinders fair competition. The African airlines have also been confronted by issues of national restrictions on ownership and control of the airlines which also obstruct the liberalization process and open skies policy in Africa. Additionally, poor cooperation and coordination between African airlines have also posed a challenge to the achievement of open skies. Lastly, Air

transport in Africa is expensive a situation which is worsened by low income which deter many Africans from accessing it.

5.2.2 Policy challenges confronting Kenya's civil aviation in the realization of the Yamoussoukro Decision

The second objective of the study was “to establish policy challenges confronting Kenya's civil aviation in the realization of the Yamoussoukro Decision”. It's evident that, these threats have hindered achievement of some of the objectives of YD. They include Air Safety record challenge as the aviation operations are prone to accidents and face many risks caused by various emergencies. These eventualities always lead to adverse implications on the victims mentally, economically and physically. The frequency and increased number of aircraft accidents in Kenya have been a challenge. These have raised concerns over quality of inspections and enforcement of laws regarding maintenance of aircrafts and acquisition of air services licenses. Aircraft noise and vibrations from the planes are environmental policy issues confronting aviation. They affect the social and economic land use activities on the ground, public health as it impairs hearing, causes trauma and sleeping disorders especially to the people who reside near the airports as well as affecting wild animals. Some have been forced to keep on migrating.

Lack of a policy framework regulating adoption of technological advancement equipments or tools such as drones also presents a challenge to the KCAA and implies a potential risk to Kenya's national security, public privacy and conflicts with other social issues as affirmed by majority of the respondents. More so, land use challenge has been attributed to encroachment arising from uncontrolled settlement around airports area, effectively causing insecurity and violating ICAO guidelines. Encroachment on airport land by residential and commercial

buildings which hamper visibility especially when aircrafts are landing and taking off poses a big threat to the aviation industry.

5.2.3 Factors influencing full implementation of the safer skies policy in Kenya

The third objective of the study was “to determine factors influencing full implementation of the safer skies policy in Kenya given benefits on air transport, economy and international trade”. The study established that, there are factors, which influence successful implementation of safer skies policy in the country. In this regard, there was a positive nexus between implementation of the air safety curriculum and capacity of instructors, current training and air safety performance. Enhancement and improving on these factors have reduced the number of accidents and eventualities occurring in the Kenya’s aviation industry. Further, Air safety training and cabin safety is considered to be a very important component as far as air safety performance is concerned. This also helps in minimizing and preventing occurrence of accidents as well as increasing of survivability in the event of an emergency situation. Another factor to be considered is the status of security area which includes the air operations area, secure area, SIDA, sterile area and exclusive area and must be established with strict adherence to the civil aviation standards and given civil aviation jurisdiction. Profiling of passengers is also identified as a tactic that has reduced the risks of the threats to aircrafts.

Additionally, increased competition staged by the entry of private operators has improved the security status of local and international carriers as well as provided a fair opportunity for trade and non-discrimination. Personnel professional licensing and qualifications has also promoted growth of the domestic airline industry in Kenya and a safer one due to the fact that, its conducted in strict adherence to the recruitment and retention policies which attracts the

appropriate human resources based on the organizational needs because the sector keeps on adopting advanced technology and innovations.

5.3 Conclusion

In conclusion and emanating from the first objective of the study which was “to determine underlying factors influencing implementation of the Yamoussoukro Decision,” the study conclude that, several factors that have been responsible for the successful implementation of YD and influence the attainment of Africa open skies. However, failure of some African countries to sign, ratify, cooperate, and coordinate with other states in signing of the agreements have deterred achievement of liberalization of the air services and derailed achievement of the YD objectives.

Based on the second objective which was “to establish policy challenges confronting Kenya’s civil aviation in the realization of the YD”, it’s clear that realization of the YD goals have been hampered by myriad of challenges which are institutional and policy based and greatly influence the realization of Africa open skies. These challenges have portrayed some institutional inadequacy in the aviation industry as well as showing how the Kenyan airspace safety record needs to be enhanced to global standards.

Lastly and based on the third objective which sought “to determine factors influencing full implementation of the safer skies policy in Kenya given benefits on air transport, economy and international trade”, it’s imperative to note that, factors influencing the achievement of a safe aviation performance in Kenya are related to accidents statistics, safety reports relating to Kenya’s aviation sector on security areas as well as safety training practice and professional personal licensing. They determine successful achievement of safe and open skies viable for international trade, tourism and movement of goods and services.

5.4 Recommendations

Several recommendations can be made based on the study findings:

1. African countries should liberalize their air market to be accessible to both intra- African and international airlines. This will increase competition and consequently reduce air fare to be accessible to majority of Africans.
2. African states should enact legislation which enables innovation and adoption of emerging technologies in civil aviation. There is need to provide legislation and standard operating procedures to regulate new innovations such as unmanned aerial vehicles such as drones.
3. The study recommends for increased training of human resources particularly on safety of the aviation to reduce the number of accidents and improve the aviation safety score.
4. There is need to review the land use policy in and adjacent to designated aviation zone in order to prevent construction of buildings and infrastructures which could potentially obstruct aircraft first responders during emergencies.
5. The countries which have not ratified the YD should do so in order to enable realization of the open sky policy in Africa.

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APPENDIX I: CIVIL AVIATION QUESTIONNAIRE

Introduction

Dear Respondent

My name is Eunice Dobby. Part of my course requires me to conduct a research study. Therefore, I am carrying out one and my research topic focuses on ***The Role of Civil Aviation in Promoting International Trade in Africa: A Case Study of Kenya Aviation Industry***. The overall objective of this study is to determine perceived influence of African civil aviation on international trade. The questionnaire is designed for this research purpose only. You are kindly requested to fill in the questionnaire for Academic purposes only. I assure you that the information gathered will be used for the purpose of this research only and will be treated with strict confidentiality. Thank you in advance for your cooperation.

Part A: Demographic Information

Tick the appropriate answer to your level best in the Boxes provided

1. Gender

Male [] Female []

2. Age

18-35 [] 36-50 [] 51-65 [] above 65 []

3. Level of education

Primary [] Secondary [] College/Technical Institute [] University []

4. Which role best describes your involvement in national Civil Aviation?

Position	Tick Appropriately
Ministry of Transport Staffs	
KCAA Officials	
Wilson Airport (Flight and Cabin Crew)	
KCAA Official	
Intra Business Persons	
JKIA (Flight and Cabin Crew)	

Part B: Underlying factors influencing implementation of the Yamoussoukro Decision

QUESTION	YES	NO
Does your country have an approved national civil aviation policy?		
Can you describe your country as compliant to Yamoussoukro decision?		
Does your Country have a written national civil aviation security programme?		
Has your state developed national action plan to ensure compliance with Yamoussoukro decision?		
Can you describe your country as an open sky?		
Are the countries in Africa committed to realizing the YD?		

5. Please indicate using the Likert scale how true the following statements are of your organization

1	2	3	4	5
Strongly disagree	Disagree	No Opinion	Agree	Strongly Agree

- i. Kenya National Civil Aviation Authority has implemented the open skies policy pursuant to Yamoussoukro Decision (YD) { }
- ii. There is adequate corporate support for implementing and maintaining a positive safety aviation culture as per the IATA guidelines in my organization { }
- iii. Air transport in my country is open to all commercial airlines around the world { }
- iv. The national civil aviation industry has eased international travel and promoted trade { }
- v. The Kenya civil aviation Authority ranks appropriately on Air Trade facilitation Index (ATFI) { }

PART C: Monitoring and Supervision of the Air Transport Sector

- i. In your opinion what is the most outstanding challenge confronting the Kenya Civil Aviation Authority in liberalizing civil aviation in the country?

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ii. From your knowledge and experience which aspect of civil aviation is critical for ensuring Air transport safety and compliance with international best practices?

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iii. In your opinion how has the national civil aviation safety affected intra-African trade facilitation

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iv. What is your opinion on liberalizing Air transport in Africa?

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v. Are there national carriers denied entries into Kenya's Airspace?

YES { }

NO { }

vi. If your Answer to the above question is YES, kindly explain briefly why?

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.....
.....

vii. Is there a country in Africa where Kenya national carrier is denied entry?

YES { }

NO { }

viii. If your Answer to the above question is YES, kindly explain briefly why?

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THANKYOU FOR YOUR RESPONSE