

Case Study No. 6
The Pandemic Effect on Sub-Saharan
Africa International Tourism, by the
Number of Arrivals and Receipts
(Current US\$) in 2018-2020

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Contents

1	Introduction	5
1.1	Objective	5
1.2	Methodology	5
2	Descriptive Statistics	5
3	Analyzing Economic Trends	7
3.1	Sub-Saharan Africa: Flight Arrivals	7
3.2	Sub-Saharan Africa: Real GDP(2019-24)	8
3.3	Sub-Saharan Africa: Impact on resources(2018-20)	8
3.4	Sub-Saharan Africa: Food Prize Inflation	9
3.5	Sub-Saharan Africa: Debt Risk Status	10
3.6	Selected Economies Fiscal COVID-19 response,2020	10
3.7	Sub-Saharan Africa: Length of Recovery	11
4	Analyzing Bussiness Dynamics	12
4.1	Percentage Of Total Exports	12
4.2	Percentage Of Total Imports	13
4.3	Expenditures for Passenger transport items	15
5	Quantitative Analysis	16
5.1	Sub African Countries Tourism	16
5.1.1	No. Of Arrivals	16
5.1.2	Receipts From Tourism	17
5.2	European Countries Tourism	18
5.2.1	No. Of Arrivals In European Countries	18
5.2.2	Receipts From Tourism	19
6	QQ Plot Comparasions	20
6.1	2018	20
6.2	2019	21
6.3	2020	22
6.4	Income Rate Comparasion	23
7	Additional work	24
8	CONTRIBUTIONS	24
9	References	25

List of Tables

1	Receipts(percentage of total exports) ,2018-20	13
2	Receipts(percentage of total imports),2018-20	14
3	Expenditures for Passenger transport items	16
4	No. Of Arrivals(2018-2020)	17
5	Receipts(Current US dollar),year	18
6	No. Of Arrivals(2018-2020)	19
7	Receipts (Current in million US dollar),year	20
8	Contribution	25

List of Figures

1	Comparison of Flight arrivals(Africa)	7
2	Impact on resources	8
3	GDP Growth	9
4	Food Prize Inflation	9
5	Debt Risk Status(2015-20)	10
6	Selected Economies Fiscal COVID-19 response,2020	11
7	Recovery of GDP	11
8	Receipts(Percentage of total exports) 2018-20	12
9	Receipts(Percentage of total imports) 2018-20	14
10	Expenditures for Passenger transport items	15
11	Number of arrivals in African countries(2018-20)	16
12	Total receipts for tourism in African countries(2018-20)	17
13	Number of arrivals in European countries(2018-20)	18
14	Total receipts for tourism in European countries(2018-20)	19
15	Comparison of no. of arrivals for the Year 2018 of African countries On the x-axis and European countries on the y-axis	21
16	Comparison of no. of arrivals for the Year 2019 of African countries On the x-axis and European countries on the y-axis	22
17	Comparison of no. of arrivals for the Year 2020 of African countries On the x-axis and European countries on the y-axis	23
18	Income Rate Comparasions	24

1 Introduction

Africa, often portrayed through a narrow lens in popular media, holds within its borders a wealth of natural beauty and cultural heritage that beckons tourists from around the globe. Despite its rich offerings, the continent's tourism sector faced an unprecedented crisis in 2020 with the emergence of the COVID-19 pandemic. The resulting travel restrictions and lockdown measures brought tourism to a standstill, severely impacting the economies of many African nations that rely heavily on tourism revenue for growth and development.

1.1 Objective

In response to this crisis, this case study sets out with a clear objective: to provide actionable insights and strategic guidance for the revitalization of Africa's tourism industry in the wake of the pandemic.

1.2 Methodology

This case study employs a comparative approach to analyze the impact of the COVID-19 pandemic on the tourism industry in Sub-Saharan African countries and European nations. We gather data on key indicators such as tourist arrivals, international tourism receipts, import and export data, and expenditure data from reputable sources spanning the years 2018 to 2020. Utilizing this data, we create visual representations, including plots and graphs, to illustrate the pandemic's effect on tourism metrics in both regions. Through rigorous analysis, we aim to extract actionable insights to inform policy-making and recovery efforts in the tourism sector. This comparative methodology offers a concise yet comprehensive understanding of the challenges and opportunities facing the industry post-pandemic.

2 Descriptive Statistics

Executive Summary:

The COVID-19 pandemic has had a profound impact on the global tourism industry, disrupting travel patterns, and severely affecting economies reliant on tourism revenue. This report presents a comparative analysis of the pandemic's impact on tourism in 13 Sub-Saharan African countries and 13 European countries, spanning the years 2018 to 2020. By analyzing key indicators such as tourist arrivals, international tourism receipts, and their contribution to GDP, this study provides insights into the resilience and vulnerabilities of the tourism sectors in both regions.

Key Findings:

Impact on Tourist Arrivals:

Both Sub-Saharan African and European countries experienced a significant decline in tourist arrivals during the pandemic. Sub-Saharan African countries witnessed a sharp decrease in arrivals, particularly in 2020, reflecting the impact of travel restrictions and lockdown measures. European countries also saw a substantial drop in arrivals, albeit to a lesser extent compared to Sub-Saharan Africa.

Revenue from Tourism: International tourism receipts, a crucial source of revenue for both regions, were heavily impacted by the pandemic. Sub-Saharan African countries, where tourism plays a significant role in GDP, experienced a notable decline in receipts, leading to economic challenges. Similarly, European countries saw a decline in tourism revenue, affecting their economic stability.

Contribution to GDP: Tourism's contribution to GDP varied across Sub-Saharan African and European countries. In Sub-Saharan Africa, where tourism accounts for a substantial portion of GDP in many countries, the pandemic-induced decline in tourism had a pronounced impact on overall economic performance. In contrast, European countries, while still heavily reliant on tourism, displayed greater economic diversification, buffering the impact to some extent.

Policy Responses and Recovery Efforts: Governments in both regions implemented various measures to mitigate the impact of the pandemic on the tourism sector. These measures included financial assistance, stimulus packages, and marketing campaigns to revive tourism. However, the effectiveness of these measures varied, with some countries experiencing faster recovery than others.

Conclusion: The COVID-19 pandemic has underscored the vulnerability of the tourism industry to external shocks, highlighting the need for resilience and adaptability. While Sub-Saharan African countries faced significant challenges due to their high dependence on tourism, European countries also grappled with economic repercussions. Moving forward, targeted policy interventions, investment in infrastructure, and diversification of tourism offerings are essential for the recovery and long-term sustainability of the tourism sector in both regions. By learning from the experiences of the pandemic, stakeholders can work towards building a more resilient and inclusive tourism industry that contributes to economic growth and development.

This report serves as a valuable resource for policymakers, industry stakeholders, and researchers seeking to understand the dynamics of the tourism sector in the context of the COVID-19 pandemic and formulate strategies for recovery and resilience.

3 Analyzing Economic Trends

During the COVID-19 pandemic from 2018 to 2020, Sub-Saharan African countries experienced significant disruptions across various economic indicators. International flight arrivals plummeted, reflecting stringent travel restrictions and border closures imposed to curb the spread of the virus. Consequently, real GDP growth rates were severely impacted, with many countries witnessing contraction or sluggish growth as economic activities slowed down. Simultaneously, food price inflation surged due to supply chain disruptions, reduced agricultural productivity, and increased demand for staple foods. These intertwined challenges underscored the vulnerability of Sub-Saharan African economies during times of crisis, highlighting the imperative for targeted interventions to mitigate adverse effects and foster resilience in the face of future shocks.

3.1 Sub-Saharan Africa: Flight Arrivals

No country has been spared. The regional economy will contract by –3.0 percent in 2020, almost 7 percentage points below IMF forecasts from only 12 months ago. The largest impact on growth has been on tourism-dependent economies, such as Mauritius and Seychelles—both down by about 17 percentage points compared with the October 2019 Regional Economic Outlook: Sub-Saharan Africa.

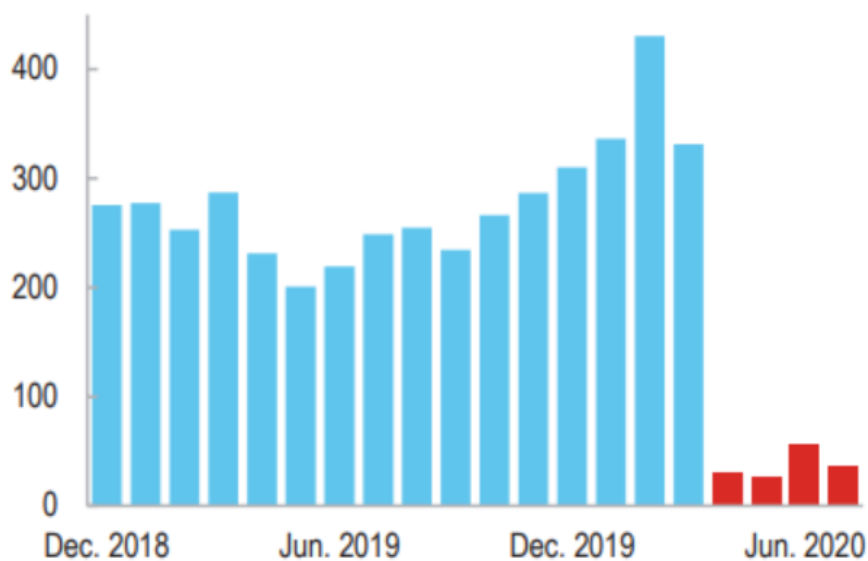


Figure 1: Comparison of Flight arrivals(Africa)

3.2 Sub-Saharan Africa: Real GDP(2019-24)

The region as a whole is not expected to return to 2019 levels until 2022 (Figure 2). In some of the region's largest economies (Angola, Nigeria, South Africa), real GDP will not return to precrisis levels until 2023 or 2024

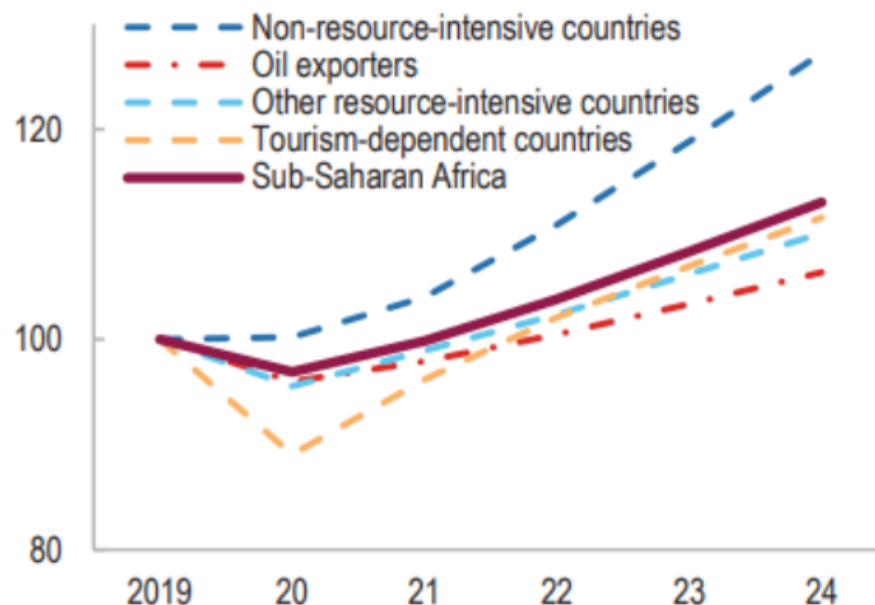


Figure 2: Impact on resources

3.3 Sub-Saharan Africa: Impact on resources(2018-20)

Activity fell sharply in the second quarter. High-frequency indicators for the region are broadly in line with projections from the June 2020 Regional Economic Outlook Update: Sub-Saharan Africa. They point to a sharp decline in activity during the second quarter of 2020—coinciding with the imposition of lockdowns across the region—and to some tentative signs of recovery since June, reflecting a loosening of containment measures, higher commodity prices, and easing financial conditions (Figure 3).

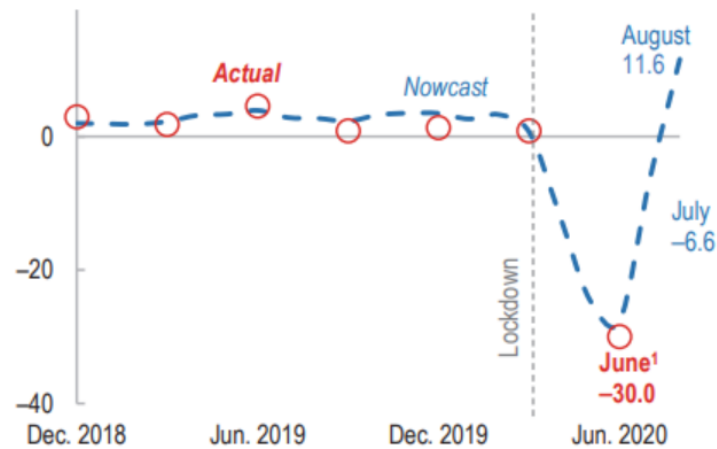


Figure 3: GDP Growth

3.4 Sub-Saharan Africa: Food Prize Inflation

On prices, having declined from a double-digit peak in 2017, average inflation in sub-Saharan Africa is projected to rise from 8.5 percent in 2019 to 10.6 percent in 2020, mostly reflecting higher food prices and the impact of depreciation (Figure 4).

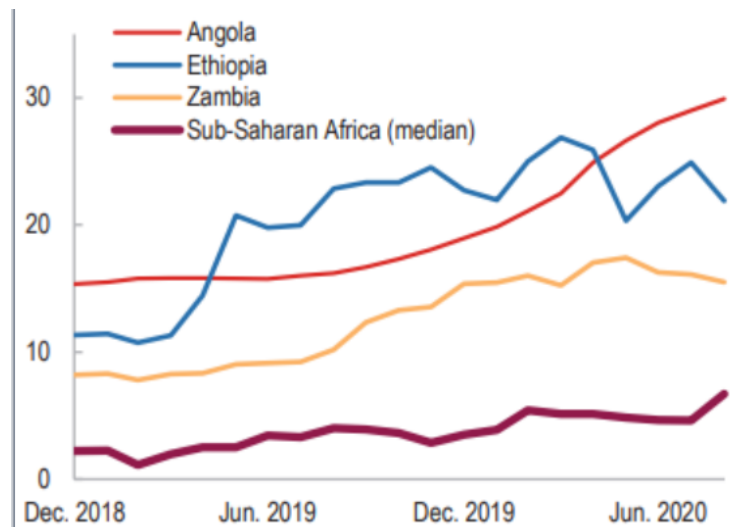


Figure 4: Food Prize Inflation

3.5 Sub-Saharan Africa: Debt Risk Status

Unfortunately, few sub-Saharan African countries will find themselves with the space to fine-tune policies this easily. Indeed, the region entered the COVID-19 crisis with significantly less fiscal space in 2019 than it had at the onset of the global financial crisis, with 16 countries either at high risk of debt distress or already in distress (Figure 5).

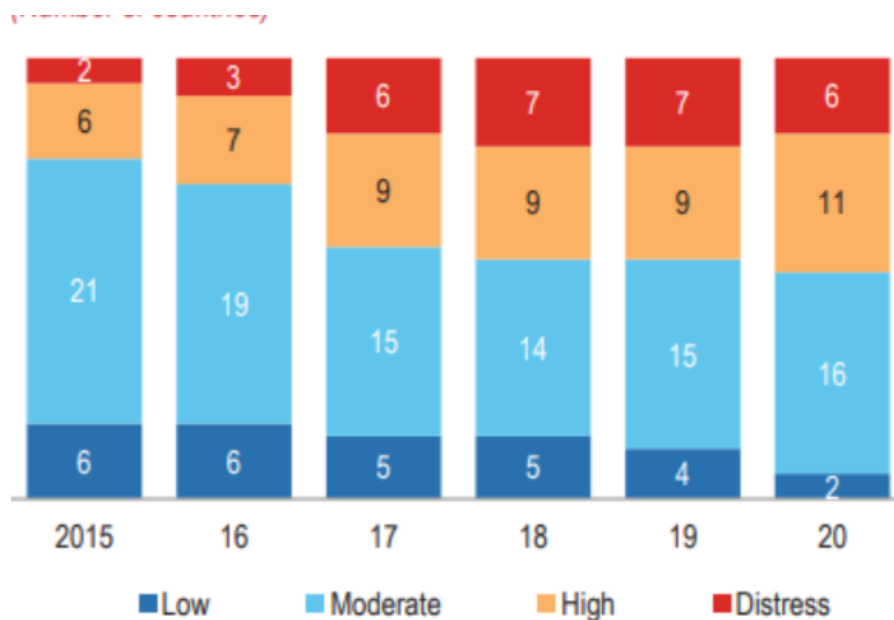


Figure 5: Debt Risk Status(2015-20)

3.6 Selected Economies Fiscal COVID-19 response,2020

Adapting the policy response. Given the tighter resource envelopes, COVID-19-related fiscal packages in the region have averaged only 3 percent of GDP— $\frac{3}{4}$ percent for added health needs, with the remainder for crisis-related transfers and spending. This is markedly less than the amounts spent in other regions (Figure 6) and has often come at the expense of current and/or capital spending in other areas (for example, Burundi, Cameroon, Guinea, Nigeria, Uganda).

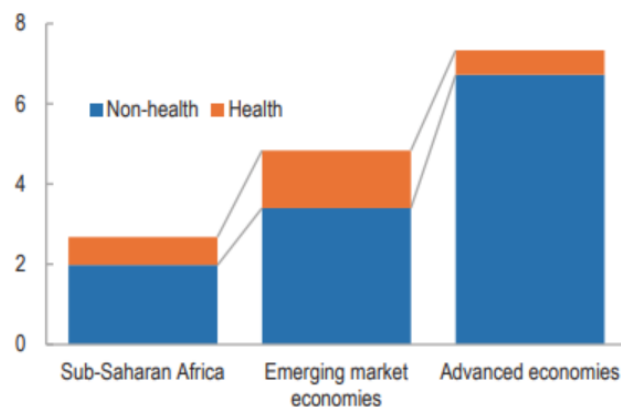


Figure 6: Selected Economies Fiscal COVID-19 response, 2020

3.7 Sub-Saharan Africa: Length of Recovery

New outbreaks could derail the recovery. In the event that outbreaks reoccur or accelerate, more protracted containment efforts may be required—resulting in a direct and immediate impact on economic activity, as well as a more indirect impact on confidence and behavior (requiring a costly reallocation of resources). Simulations in which a second global outbreak emerges in 2021 suggest that downside risks to growth are significant. Growth would drop further by $1\frac{1}{2}$ – $2\frac{1}{2}$ percentage points over the near term, resulting in a cumulative added output loss of 5–7 percentage points of GDP over the next two years, and many countries (especially oil exporters) failing to return to precrisis output levels before 2025 (Figure 7).

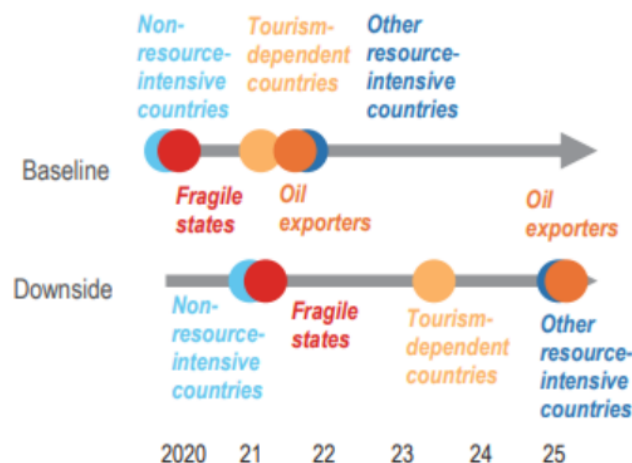


Figure 7: Recovery of GDP

4 Analyzing Bussiness Dynamics

4.1 Percentage Of Total Exports

The number of exports from Sub-Saharan African countries exhibited a decline from 2018 to 2020, reflecting the adverse impact of the COVID-19 pandemic on international trade. In 2018, exports were relatively stable, with steady growth observed in various sectors. However, the onset of the pandemic in 2020 led to disruptions in global supply chains, reduced consumer demand, and stringent trade restrictions, resulting in a significant contraction in exports across the region. The decline in exports can be attributed to various factors, including decreased demand for goods and services, logistical challenges, and reduced economic activity due to lockdown measures. This downward trend underscores the vulnerability of Sub-Saharan African economies to external shocks and highlights the urgent need for targeted interventions to support recovery and stimulate trade in the post-pandemic era.

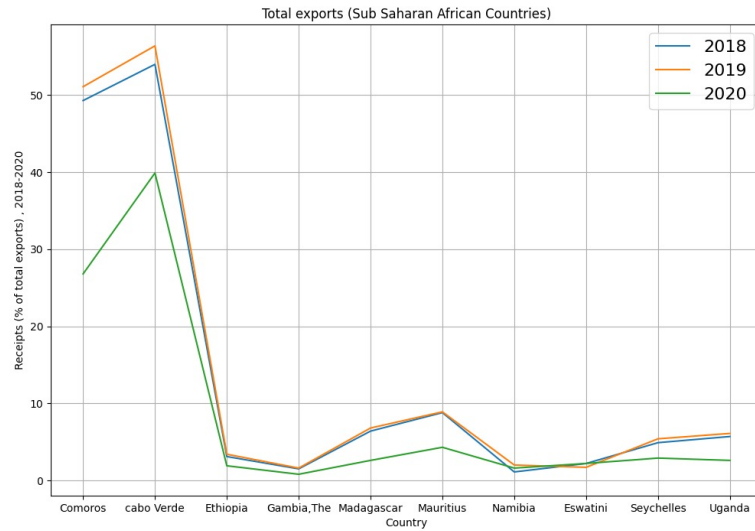


Figure 8: Receipts(Percentage of total exports) 2018-20

S.No.	country	2018	2019	2020
1	Cote d'Ivoire	4.2	4	1.5
2	Comoros	49.3	51.1	26.8
3	cabo Verde	54	56.4	39.9
4	Ethiopia	3.1	3.4	1.9
5	Gambia,The	1.5	1.6	0.8
6	Madagascar	6.4	6.8	2.6
7	Mauritiu	8.8	8.9	4.3
8	Namibia	1.1	2	1.6
9	Eswatini	2.2	1.7	2.2
10	Seychelles	4.9	5.4	2.9
11	Uganda	5.7	6.1	2.6

Table 1: Receipts(percentage of total exports) ,2018-20

4.2 Percentage Of Total Imports

The number of imports into Sub-Saharan African countries experienced a decline from 2018 to 2020, reflecting the impact of the COVID-19 pandemic on global trade dynamics. In 2018, imports were relatively stable, driven by demand for various goods and services. However, the emergence of the pandemic in 2020 disrupted supply chains, constrained economic activity, and led to a significant reduction in imports across the region. Factors contributing to this decline include reduced consumer spending, trade restrictions, and logistical challenges associated with border closures and transportation disruptions. The decrease in imports underscores the interconnectedness of Sub-Saharan African economies with the global market and highlights the need for resilience and adaptability in navigating external shocks. As countries strive to recover from the pandemic's effects, policymakers must implement strategies to promote trade facilitation, stimulate domestic production, and enhance economic resilience in the face of future challenges.

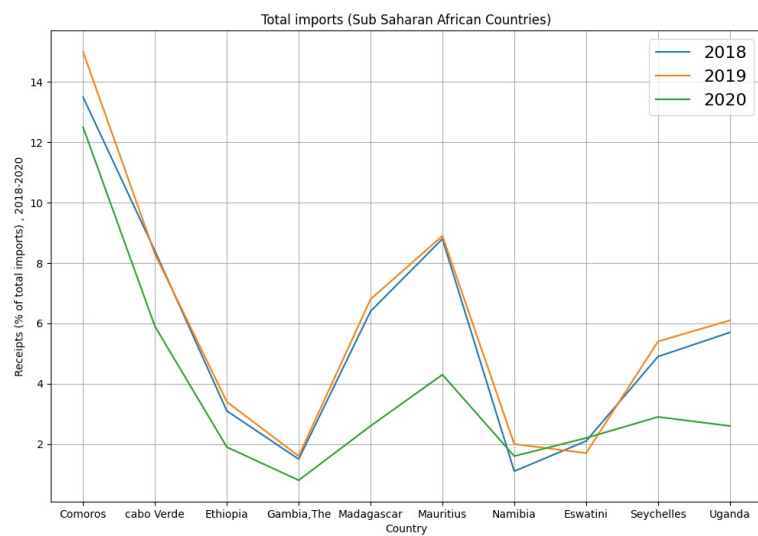


Figure 9: Receipts(Percentage of total imports) 2018-20

S.No.	country	2018	2019	2020
1	Cote d'Ivoire	4.7	5.5	2.5
2	Comoros	13.5	15	12.5
3	cabo Verde	39.9	8.4	8.3
4	Ethiopia	3.1	3.4	1.9
5	Gambia, The	1.5	1.6	0.8
6	Madagascar	6.4	6.8	2.6
7	Mauritiu	8.8	8.9	4.3
8	Namibia	1.1	2	1.6
9	Eswatini	2.2	1.7	2.2
10	Seychelles	4.9	5.4	2.9
11	Uganda	5.7	6.1	2.6

Table 2: Receipts(percentage of total imports),2018-20

4.3 Expenditures for Passenger transport items

The expenditure for passenger transport in Sub-Saharan African countries experienced a notable decline from 2018 to 2020, reflecting the profound impact of the COVID-19 pandemic on travel and mobility. In 2018, expenditure on passenger transport was relatively stable, driven by domestic and international travel demand. However, with the onset of the pandemic in 2020, travel restrictions, border closures, and reduced consumer confidence led to a sharp decrease in expenditure for passenger transport across the region. This decline can be attributed to factors such as canceled flights, decreased tourism activity, and limitations on public transportation services. While the extent of the decline may vary among countries, the overall trend underscores the challenges faced by the transportation sector and the broader tourism industry in Sub-Saharan Africa during the pandemic. As countries navigate the recovery phase, strategies to revive passenger transport, restore traveler confidence, and adapt to changing travel patterns will be essential for stimulating economic growth and rebuilding resilient transportation networks.

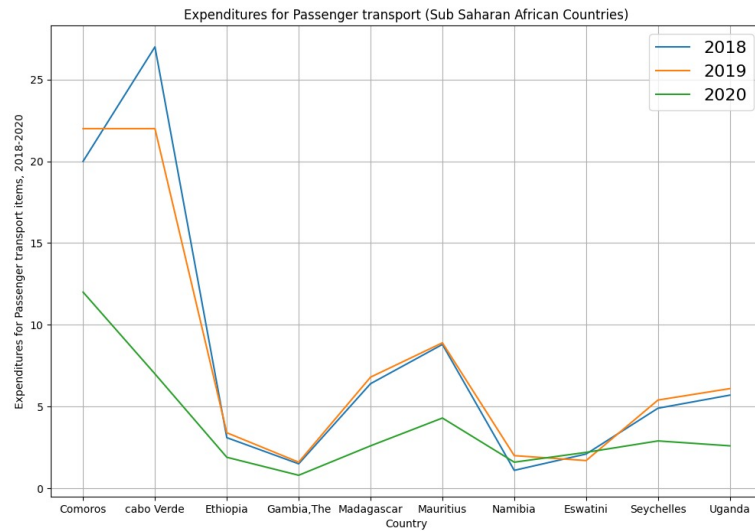


Figure 10: Expenditures for Passenger transport items

S.No.	country	2018	2019	2020
1	Cote d'Ivoire	20.9	22.8	11
2	Comoros	20	22	12
3	cabo Verde	27	22	7
4	Ethiopia	3.1	5.8	1.5
5	Gambia,The	1.6	1.9	0.5
6	Madagascar	6.6	6.2	2.6
7	Mauritiu	8.7	8.9	4.4
8	Namibia	1.4	3	1.5
9	Eswatini	2.5	1.5	2.1
10	Seychelles	5.9	5.4	2.9
11	Uganda	5.7	6.1	2.6

Table 3: Expenditures for Passenger transport items

5 Quantitative Analysis

5.1 Sub African Countries Tourism

5.1.1 No. Of Arrivals

Down below are the number of arrivals in the 13 Sub-Saharan African countries from the year 2018 to 2020. We can see that the most number of arrivals from all the 13 countries were in South Africa. We can observe that in the year 2018 to 2019, the number of arrivals is relatively stable, compared to some countries which experience a slight increase or decrease in arrivals but not by a huge margin. On the other hand, in 2020 there was a huge decrease in the number of arrivals. The lowest arrival seems to be in Comoros while the highest arrival is seen in South Africa. Mauritius, Namibia, and Eswatini seem to have almost an equal amount of arrivals from 2018 to 2020, which means it doesn't get as much impact from the pandemic as the other countries have faced.

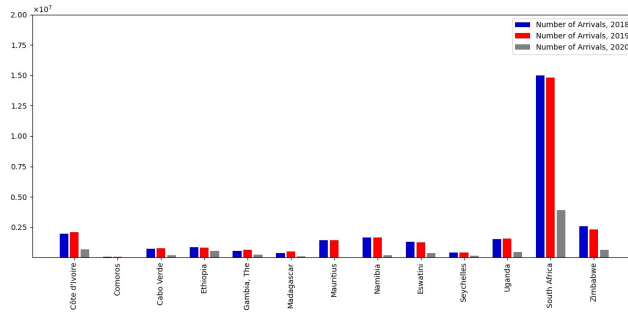


Figure 11: Number of arrivals in African countries(2018-20)

S.No.	country	2018	2019	2020
1	Cote d'Ivoire	1,965,000	2,070,000	668,000
2	Comoros	35,900	45,100	7,000
3	cabo Verde	710,000	758,000	180,000
4	Ethiopia	849,000	812,000	518,000
5	Gambia,The	552,000	620,000	246,000
6	Madagascar	360,000	486,000	87,100
7	Mauritiu	1,431,000	1,418,000	316,000
8	Namibia	1,639,000	1,651,000	187,100
9	Eswatini	1,277,000	1,226,000	345,300
10	Seychelles	405,000	428,000	124,500
11	Uganda	1,506,000	1,543,000	473,000

Table 4: No. Of Arrivals(2018-2020)

5.1.2 Receipts From Tourism

Furthermore, down below is the chart that shows us the number of receipts from all 13 countries. We can see that three countries stand out, namely, Ethiopia, Mauritius, and South Africa. A trend we can observe here is that during the years 2018 to 2019 the countries had a stable rate of receipts, a slight increase or decrease but only by a small margin. In 2020 we can observe that all the countries experienced a decrease in the number of receipts. Other than Comoros which happens to have the same amount of receipts in 2020 as it did in 2019.

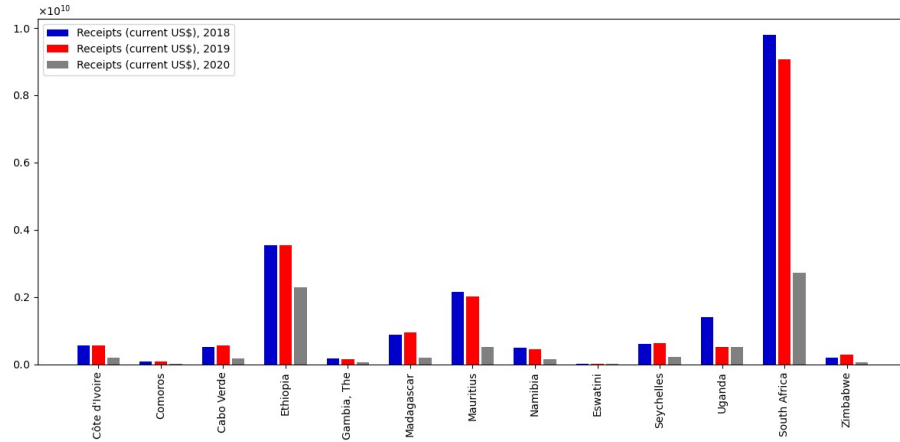


Figure 12: Total receipts for tourism in African countries(2018-20)

S.No.	country	2018	2019	2020
1	Cote d'Ivoire	551000000	550500000	199300003
2	Comoros	73699997	72699997	18500000
3	cabo Verde	520000000	567000000	169000000
4	Ethiopia	3548000000	3529000000	2282000000
5	Gambia,The	174000000	157000000	53000000
6	Madagascar	879000000	951000000	202000000
7	Mauritius	2161000000	2024000000	518000000
8	Namibia	488000000	451000000	155000000
9	Eswatini	16400000	14300000	73000000
10	Seychelles	611000000	618000000	228000000
11	Uganda	1400000000	518000000	51800000

Table 5: Receipts(Current US dollar),year

5.2 European Countries Tourism

5.2.1 No. Of Arrivals In European Countries

The trend of tourist arrivals in European countries from 2018 to 2020 reflects the significant impact of the COVID-19 pandemic on the tourism industry. In 2018, tourist arrivals were generally stable or experiencing growth, driven by factors such as increased travel demand and favorable economic conditions. However, the emergence of the pandemic in 2020 led to a sharp decline in tourist arrivals across Europe as countries implemented travel restrictions, border closures, and lockdown measures to contain the spread of the virus. This decline in tourist arrivals highlights the unprecedented challenges faced by the European tourism sector during the pandemic, including reduced international travel, canceled bookings, and widespread disruptions to the hospitality and leisure industries.

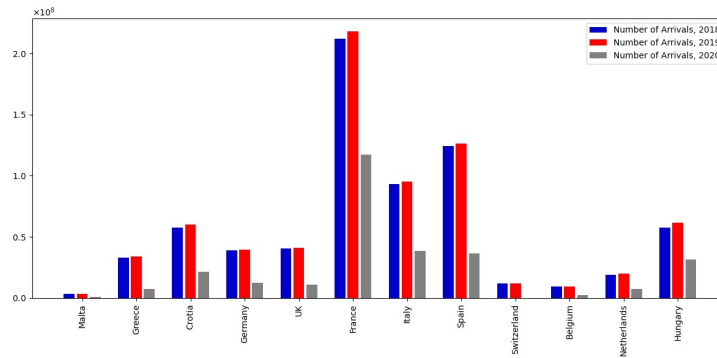


Figure 13: Number of arrivals in European countries(2018-20)

S.No.	country	2018	2019	2020
1	Malta	3232000	3519000	718000
2	Greece	33072000	34005000	7406000
3	Croatia	57668000	60021000	21608000
4	Germany	38881000	39563000	12449000
5	UK	40283000	40857000	11101000
6	France	211998000	217877000	117109000
7	Italy	93228601.6	95399000	38419000
8	Spain	124456000	126170000	36410000
9	Switzerland	11715000	11818000	11918000
10	Belgium	9119000	9343000	2584000
11	Netherlands	18780000	20129000	7265000
12	hungary	57667000	61397000	31641000

Table 6: No. Of Arrivals(2018-2020)

5.2.2 Receipts From Tourism

The trend of tourism receipts in European countries from 2018 to 2020 reflects the profound impact of the COVID-19 pandemic on the tourism sector. In 2018, tourism receipts were generally stable or experiencing growth, indicating strong revenue generation from international visitors. However, the onset of the pandemic in 2020 precipitated a sharp decline in tourism receipts across Europe as travel restrictions, border closures, and lockdown measures severely disrupted the flow of tourists and related spending. This decline in tourism receipts underscores the significant economic challenges faced by European countries reliant on tourism revenue, including reduced income for businesses in the hospitality, accommodation, and leisure sectors.

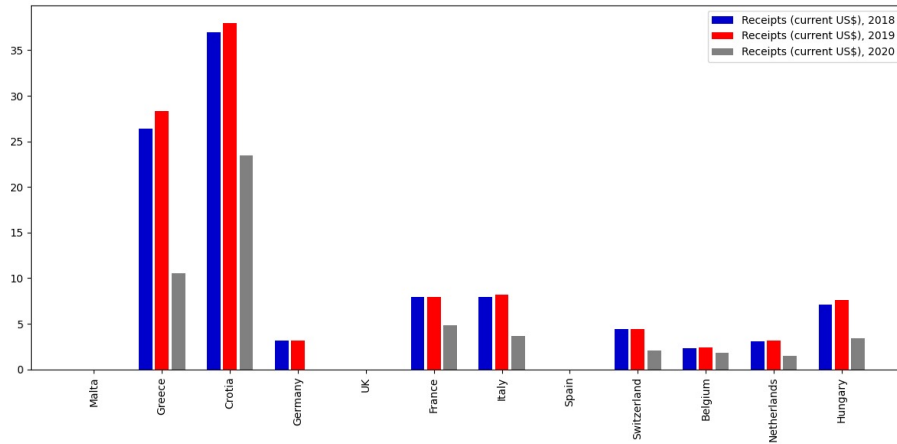


Figure 14: Total receipts for tourism in European countries(2018-20)

S.No.	country	2018	2019	2020
1	Malta	26.8	28.6	10.2
2	Greece	26.4	28.3	10.5
3	Croatia	37	38	23.5
4	Germany	3.2	3.2	0.8
5	UK	0	0	0
6	France	7.9	7.9	4.8
7	Italy	7.9	8.2	3.7
8	Spain	0	0	0
9	Switzerland	4.4	4.4	2.1
10	Belgium	2.3	2.4	1.8
11	Netherlands	3.1	3.2	1.5
12	hungary	7.1	7.6	3.4

Table 7: Receipts (Current in million US dollar),year

6 QQ Plot Comparasions

6.1 2018

Sub-Saharan African Countries: Experienced a period of stable growth in tourism throughout the region. Countries like Kenya, Tanzania, South Africa, and Mauritius continued to attract international visitors drawn to their diverse wildlife, stunning landscapes, and rich cultural heritage. The tourism industry played a crucial role in driving economic growth, creating jobs, and generating revenue for local communities.

European Countries: Enjoyed another successful year in tourism, with destinations such as Spain, Italy, France, and Greece remaining popular among travelers from around the world. The region's historical sites, cultural attractions, and scenic beauty continued to draw millions of visitors. However, concerns about overtourism started to emerge in some cities and destinations, prompting discussions about sustainable tourism practices.

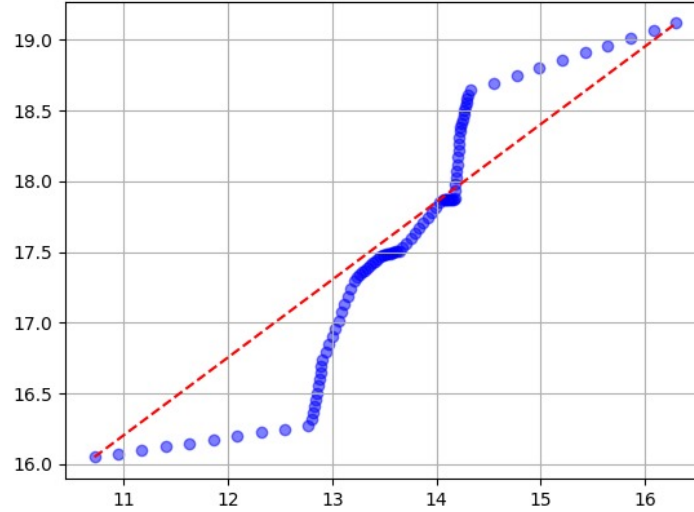


Figure 15: Comparison of no. of arrivals for the Year 2018 of African countries On the x-axis and European countries on the y-axis

6.2 2019

Sub-Saharan African Countries: Tourism in the region continued to grow steadily, with many countries benefiting from increased visitor numbers and tourism revenue. Popular destinations like Seychelles, Mauritius, and Kenya experienced a surge in international arrivals, contributing to the local economy and supporting livelihoods in the tourism sector. Investments in infrastructure and marketing efforts helped to promote the region as a desirable travel destination.

European Countries: European tourism thrived for much of 2019, with countries welcoming record numbers of visitors. The region's iconic landmarks, cultural attractions, and vibrant cities attracted tourists from all over the world. However, signs of strain began to emerge in popular destinations as concerns about overcrowding, environmental impact, and cultural preservation grew. Some cities started implementing measures to manage tourism flows and promote sustainable travel practices.

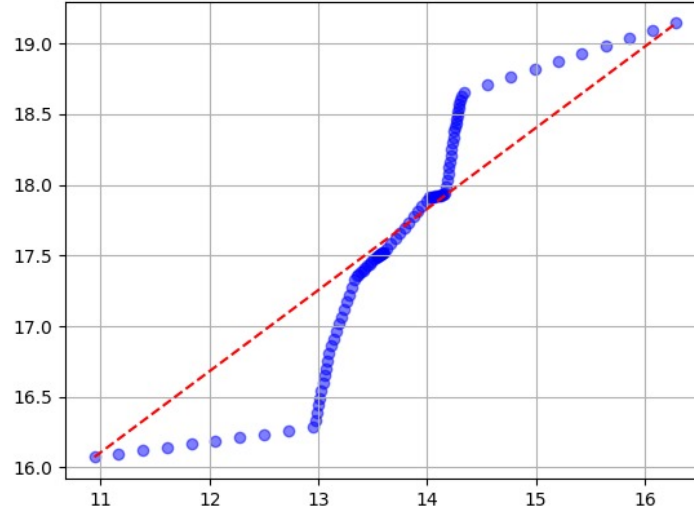


Figure 16: Comparison of no. of arrivals for the Year 2019 of African countries On the x-axis and European countries on the y-axis

6.3 2020

2020:

Sub-Saharan African Countries: The COVID-19 pandemic brought tourism in the region to a sudden halt in early 2020. Travel restrictions, border closures, and fear of the virus led to a sharp decline in tourist arrivals, devastating the tourism industry. Countries heavily reliant on tourism, such as Seychelles, Mauritius, and Kenya, faced significant economic losses and widespread unemployment. Governments and tourism stakeholders scrambled to implement measures to mitigate the impact, including promoting domestic tourism, implementing health and safety protocols, and providing financial assistance to affected businesses.

European Countries: The COVID-19 pandemic had a catastrophic impact on European tourism in 2020. As the virus spread across the continent, countries implemented strict lockdown measures, closed borders, and imposed travel restrictions, effectively bringing international tourism to a standstill. Popular tourist destinations became ghost towns as attractions, hotels, and restaurants closed their doors. The economic fallout was severe, with millions of jobs lost in the tourism sector and businesses facing financial ruin. Governments responded with financial aid packages, marketing campaigns to promote domestic tourism, and the gradual reopening of borders with stringent health and safety measures in place.

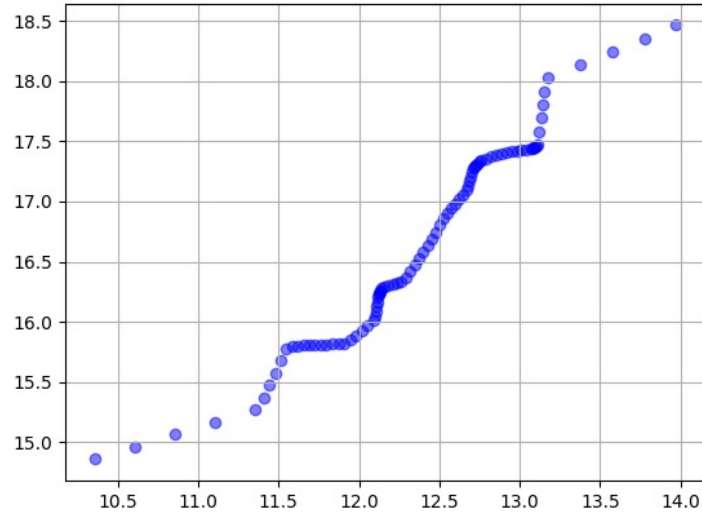


Figure 17: Comparison of no. of arrivals for the Year 2020 of African countries On the x-axis and European countries on the y-axis

6.4 Income Rate Comparasion

For our research on Sub-Saharan Africa's international tourism, the qualitative data is the income rate. As seen below, the income rate is divided into 5 categories, namely low income, lower middle income, middle income, upper middle income, and high income. We choose income rate as this plays an important role in tourism and travel. By using SPSS, we can come up with the frequency table and chart. We can see that this category has a different cumulative percentage. The highest frequency consists of lower middle income. Which have a frequency of 5 and a cumulative percentage of 69.2.

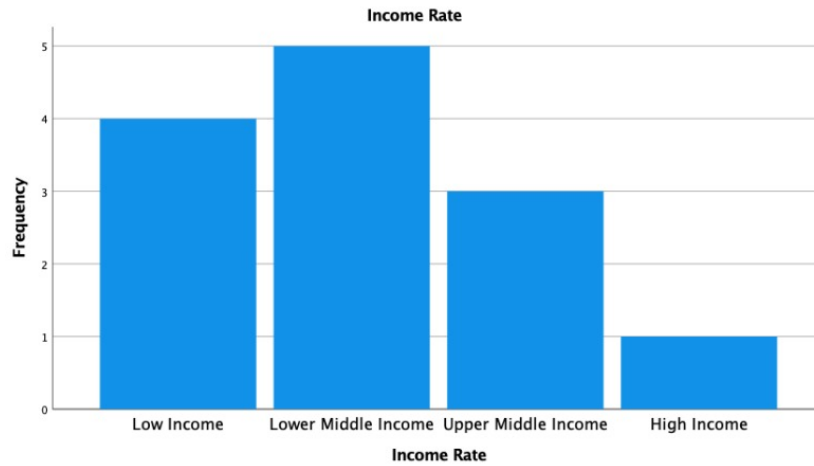


Figure 18: Income Rate Comparasions

Income Rate	Frequency	Percent	Valid Percent	Cumulative Percent
low	4	30.8	30.8	30.8
lower middle	5	38.5	38.5	69.2
upper middle	3	23.1	23.1	92.3
high	1	7.7	7.7	100
total	13	100	100	-

7 Additional work

We have done a comparison between trends in tourism affected due to Covid-19 pandemic in some prominent European countries with the sub-Saharan African countries. We have analysed the trends in number of arrivals and total receipts during the year 2018 to 2020 in European countries. We have also added some additional data for Sub Saharan African countries for percentage of exports , imports, expenditure on passenger transport for better analysis.

8 CONTRIBUTIONS

Name	Report writing	Data analysis	Web resources	Overall contribution
Diksha	Analzing Economic Trends	European Data	Open AI	16.67
Manya	Descriptive Statistics,QQ plot	European Data	Google	16.67
Shivam	Analzing Business Dynamics	African Data	World Bank	16.67
Raghav	QQ Plot Comparison	African Data	Open AI	16.67
Lakshya	Quantitative Analysis	African Data	Chatgpt	16.67
Tushar	Quantitative Analysis	European Data	Google	16.67

Table 8: Contribution

9 References

- <https://data.worldbank.org/indicator/ST.INT.TRNR.CD>
- International Monetary Fund, World Economies and Financial surveys
- <https://www.imf.org/en/News/Articles/2021/04/14/pr21108-sub-saharan-africa-navigating->