

Tourism dependence and socio-economic stability: Exploring alternative stable states.

A case study of Curaçao

By

Emma Laging Tobias Brok

3260933

[e.c.w.lagingtobiasbrok@student.utwente.nl](mailto:e.c.w.lagingtobiasbrok@student.utwente.nl)

Submitted in partial fulfillment of the requirements for the degree of Master of Science, program Public Administration, University of Twente

2025

Supervisors:

Dr. Igor Tempels Moreno Pessoa

Dr. Shawn Donnelly

Acknowledgements:

I would like to express my appreciation to my first supervisor for his guidance and support, as well as my second supervisor for his constructive feedback. Their contributions and support were valuable in helping me write my thesis. Additionally, I would like to thank the interviewees, who offered me their time and contributed to this study through their interviews.

Thank you for everything.

Mi ke ekspresá mi apresio na mi prome supervisor pa su supervishon i apoyá, tambe mi ke ekspresá mi apresio na mi segundo supervisor, ku a duna mi su komentario konstruktivo. Nan kontribushon i apoyá tabata masha importante pa skirbi mi tesis. Tambe, mi ke yama e entrevistadonan danki, ku a duna mi nan tempu i a duna e kontribushon na mi tesis.

Masha danki pa tur kos.

## **Abstract**

Small island developing states (SIDS) face high dependence on tourism, which leaves them vulnerable to external shocks and other challenges. Therefore, the purpose of this research is to explore how tourism-dependent destinations have been shaped by tourism dependence. This study is a case study of the Dutch Caribbean island of Curaçao. It analyzes how tourism dependence in Curaçao influences socio-economic stability, through adaptive capacity, resilience, and transformation. The research design involves a mixed methods approach; secondary data was collected through desk research and was taken from public data sets, newspaper articles, and policy papers. The primary data was taken from interviews, which were sampled through purposive sampling and snowball sampling. Thematic analysis was performed on the qualitative data, and regression analysis on the quantitative data. The analysis showed that Curaçao has an economic dependence on tourism, which increased after 2020. This means that the main actors, the government of Curaçao and its residents, are reliant on tourism-related income. This dependency influences residents and the government's behavior, as they are less likely to act against tourism growth and aim to attract foreign investors. However, this reinforces tourism dependence, as the government is less likely to impose regulations and policies to mitigate uncontrolled tourism growth. This results in structural limitations that inhibit transformation away from tourism dependence. Although the small sample size limits the generalizability of the findings, as not all perspectives may be represented in the interviews. It can be concluded that tourism dependence influences socio-economic stability through foreign investors dominating the sector and governments having limited control over its regulation, while residents are vulnerable.

## Table of contents

List of tables and figures .....	5
List of abbreviations .....	5
Introduction .....	6
<i>Scientific and social relevance</i> .....	7
<i>Research question and sub-questions</i> .....	8
Literature review .....	9
<i>Introduction</i> .....	9
<i>Tourism growth as a driver of economic growth</i> .....	9
<i>Tourism dependence role in shaping SIDS economies</i> .....	10
<i>Socio-economic impacts of tourism dependency</i> .....	11
<i>Vulnerabilities and resilience in tourism-dependent SIDS</i> .....	12
<i>Government role in tourism dependence</i> .....	13
<i>Research gaps and study contribution</i> .....	14
<i>Conclusion</i> .....	14
Conceptualization .....	15
<i>Tourism dependence as an independent variable</i> .....	15
<i>Stable state as dependent variable</i> .....	15
<i>Tipping Point &amp; Resilience</i> .....	16
Theoretical framework .....	16
Conceptual Model .....	18
<i>Stable states</i> .....	18
<i>Tipping points, resilience, and perturbations</i> .....	19
<i>Transformation and trajectories</i> .....	21
<i>Hypotheses</i> .....	21
<i>Justification and contribution</i> .....	22
Operationalization .....	23
<i>Conceptual definition of key variables</i> .....	23
<i>Justification</i> .....	24
Methodology .....	25
<i>Research Design</i> .....	26
<i>Data Collection Methods</i> .....	26
<i>Data Analysis</i> .....	27
<i>Reliability, Validity, and Ethical Considerations</i> .....	28
Results .....	29
<i>Measuring tourism dependency in Curaçao</i> .....	29
<i>Resilience and adaptive capacity in Curaçao</i> .....	32
<i>Socio-economic tipping points</i> .....	44
<i>Opportunities for transformation</i> .....	55
Discussion.....	66

<i>Key findings</i> .....	66
<i>Interpretations</i> .....	66
<i>Theoretical and practical implications</i> .....	67
<i>Limitations</i> .....	68
<i>Recommendations</i> .....	69
Conclusion .....	70
References.....	71
Appendix A: Methodology .....	78
Appendix B: Data sources .....	87
Appendix C: Interview guide .....	91
Appendix D: Codebook.....	97

## List of tables and figures

Table 1 .....	24
Table 2 .....	25
Table 3 .....	25
Table 4 .....	29
Table 5 .....	30
Table 6 .....	31
Table 7 .....	52
Table 8 .....	65
Figure 1. Country Profile of Curaçao (UNHCR, n.d.) .....	7
Figure 2. Visualization of the ball-in-cup analogy (Lamothe et al., 2019). .....	17
Figure 3. Locations of the stable states .....	19
Figure 4. Visualization ball-in-cup analogy, drawing from the conceptual framework.....	20
Figure 5. Schematic overview of the tipping points and their values. ....	21
Figure 6. The Tourism Economic Diversification Index of Curaçao, per year (2012-2023).....	29
Figure 7. The contribution of tourism (%) to the GDP of Curaçao per year (2012-2023). ....	31
Figure 8. Overview of the adapted PESTE-type framework. ....	44
Figure 9. Schematic overview of previous tipping points and the previous and current stable state.....	52

## List of abbreviations

AI	All-inclusive
CDEMA	Caribbean Disaster Management Agency
CTB	Curaçao Tourism Board
GDP	Gross domestic product
MEO	Ministry of Economic development
MVA	Manufacturing Value Added per capita
SDG	Sustainable Development Goal
SSS	Sun-Sea-Sand
TCGDP	Tourism contribution to GDP
TEDI	Tourism Economic Dependency Index
TNE	Transnational education

## Introduction

The tourism industry is one of the largest industries globally, as it provides economic growth for tourist destinations and improves the overall well-being of communities in those destinations. In addition, it can play a role in the improvement of infrastructure, labor, and construction, as the destination should be able to meet the tourism demand. Consequently, tourism positively affects other sectors, such as transportation, agriculture, manufacturing, construction, and other service sectors (Elgin & Eleven, 2024). Thus, specializing in tourism can bring several economic advantages and it is seen as crucial for the economic development in small island developing states (SIDS) (Pratt, 2015). Most SIDS have become dependent on tourism, resulting from the growth of international tourism happening simultaneously with the restructuring of the economies of SIDS (Sharpley & Ussi, 2014). Therefore, tourism has become an important source of income for most SIDS, as it contributes to their economies and their gross domestic product (GDP). Consequently, these SIDS welcome an abundance of tourists on a yearly basis, resulting in overtourism.

Overtourism has been defined as the impact of tourism on a destination that negatively influences the quality of life and the quality of visitors' experiences as a result of increasing tourist numbers (Cappochi *et al.*, 2019; Jurgens *et al.*, 2024). Over tourism can be linked to tourism dependence, which is defined as tourism accounting for over 20% of the export earnings of a destination (Gounder and Cox, 2022). Overtourism mainly occurs in the Caribbean, which indicates that most of those destinations are tourism-dependent, namely small island tourism economies (Peterson, 2020). This results from traditional tourism types, which are characterized by sea-sand-sun (SSS) tourism (Dinica, 2012). The Caribbean is the ideal destination for this type of tourism, as they have all three. However, this can lead to negative environmental and social impacts. Although suggestions have been made to increase the links between the tourist sector and the local economy, to maximize the local benefit and enhance local welfare (Mitchell & Li, 2017). This, however, remains within the paradigm that only tourism can enhance the local welfare in SIDS.

This research focuses on a case study of Curaçao (figure 1), which is an SIDS located in the Caribbean and part of the Kingdom of the Netherlands. Similar to many SIDS, Curaçao's main source of income is tourism (Dinica, 2012). In 2022, tourism made up 48% of the export earnings of Curaçao (Henriquez, 2023). This indicates that Curaçao is tourism-dependent as well. The increased tourism in Curaçao has resulted in local, social and economic changes. For example, improved facilities and infrastructure; however, the infrastructure cannot always cope with increasing numbers of tourists (Filiposki *et al.*, 2016). Furthermore, tourism was a main driver for inflation of the prices of goods and services, which caused difficulties for residents in areas with high poverty rates (Filiposki *et al.*, 2016). Additionally, housing prices increased as a result of foreigners' purchase of holiday homes. Residents lack involvement in the tourism sector, which is due to few investment opportunities in the tourism sector, resulting from low monthly pay and a high unemployment rate. This is further exacerbated by little local economic benefits due to foreign

investors in the tourism sector (Dinica, 2012). Although the tourism sector created direct and indirect employment through various lines of work, the tourism sector did not help decrease structural unemployment and poverty on the island (Dinica, 2012). However, these challenges cannot be solved through the development of the tourism sector alone. This leads to the research question: How does tourism dependence influence the socio-economic stability of Curaçao using an ecological stable state perspective?

<b>Name:</b>	Curaçao
<b>Political Status:</b>	Constituent country within the Kingdom of the Netherlands
<b>Government type:</b>	Parliamentary democracy
<b>Capital:</b>	Willemstad
<b>Surface area:</b>	444 km km <sup>2</sup>
<b>Population:</b>	Estimated at 165.000 (2023)
<b>Official language(s):</b>	Dutch, Papiamentu, and English
<b>Flag:</b>	

Figure 1. Country Profile of Curaçao (UNHCR, n.d.).

### Scientific and social relevance

Although the use of an ecological stable state might be unconventional, it can be viewed as an attempt to conceptualize the concept of the stable state in a socio-economic system in a heuristic way. Additionally, the use of an ecological approach in this context can add to the integration of two fields in research: ecology and political economy, and socio-economic perspectives. In ecological environments, it has been observed that the initial conditions can determine which species is most dominant in the environment (Manhães *et al.*, 2022). Thus, the initial conditions in Curaçao could have led to dominance of the tourism sector. Therefore, this approach can help understand how tourism dependence influences socio-economic stability. In essence the aim is to find out if the socio-economic environment of Curaçao can be restored to a desirable state, similar to ecological restoration, which aims to transform a degraded area into a healthier one (Manhães *et al.*, 2022). Furthermore, in tourism-related literature, there is a general focus on the economic aspect of tourism growth. For instance, Semrad & Rivera (2015) focused on the difference between the tourists' and stakeholders' perspectives of Curaçao. Although this can help gain an understanding of the tourists' wants and needs and of what stakeholders are willing to invest, residents were left out as stakeholders in this article. Therefore, there is a lack of literature on the influence of tourism on residents and their perspectives regarding tourism. Additionally, most literature focused on sustainable alternatives for tourism, such as ecotourism, as an alternative to the current SSS

tourism model (Dinica, 2012). However, most literature does not challenge governments and policymakers to look beyond tourism as an alternative and minimize tourism dependence. Therefore, residents and the government are considered the most important actors for this research. The scientific relevance of this study is the aim to develop an integration between ecology and social systems theory. Additionally, it aims to add to existing literature regarding tourism and its influence on residents and their socio-economic state.

### Research question and sub-questions

The research question of this paper is: How does tourism dependence influence the socio-economic stability of Curaçao using an ecological stable state perspective? Each subquestion was answered through a top-down and bottom-up perspective, using two actors; the government of Curaçao and the residents of Curaçao. The research question will be answered through the following sub-questions:

1. To what extent is Curaçao's socio-economic stability dependent on tourism?
2. To what extent does tourism dependence affect the type of resilience within the stable state of Curaçao?
3. To what extent does tourism dependence affect the potential for reaching tipping points?
4. How can tourism dependence be used as an opportunity for transformation to an alternative stable state?

The research question can be divided into two main components: i) the tipping point for transformation, ii) the resilience that is needed to reach a tipping point. These components are then used to address the transformation to a desired stable state.

The first sub-question is about the degree of tourism dependence in the stable state, and the question aims to answer the extent of tourism dependence on the island. This helps determine the location of the stable state, in order to assess how the socio-economic stability can change. The second sub-question contains the resilience component and will measure the responses against the impact of tourism dependence. This connects to the research question as it attempts to assess the resilience, which is needed for transformation to alternative stable states. Additionally, it connects to the third sub-question on tipping points, as without resilience, tipping points are not reached. The fourth sub-question attempts to answer how tourism dependence can be used to transform into an alternative stable state. This relates to the research question because it aims to give recommendations on how to undergo that transformation. The theory underpinning these sub-questions will be explained in the theoretical framework and conceptual model.

## Literature review

### Introduction

This literature review discusses various concepts related to tourism dependence; firstly, how tourism growth is linked to economic growth. Second, how tourism dependence shapes the economies of tourism-dependent SIDS. Third, the socio-economic impact of tourism dependence. Fourth, the vulnerabilities and resilience of SIDS. Fifth, the role of governments in tourism-dependent SIDS. Therefore, the purpose of this literature review is to identify previous research on tourism dependency and its implications, and to identify any research gaps to which this research can contribute.

### Tourism growth as a driver of economic growth

Neoliberalism has been defined by the rise of market ideologies, intense market competition, increased foreign investments, and decreased state intervention. It can cause fast economic growth; however, those large-scale changes can pose challenges for the groups facing them (Hall & Lamont, 2013). Tourism has shown positive effects for economic growth, as a 10% increase in tourism spending was found to account for a 0.3% to 1% increase in economic growth (Cannonier & Burke, 2019). In the Caribbean, over forty percent of the GDP shares come from tourism (Jurgens *et al.*, 2024). The focus on tourism in SIDS was a response to the improvement of their self-sufficiency and self-reliance, since tourism proved to be a high-value export product. This development started in the 1950s and 1960s, using tourism as a modernization strategy for countries to earn foreign exchange (Scheyvens & Momsen, 2020). In addition, Caribbean SIDS have the ideal circumstances to promote the perfect holiday: sun, sea, and sand. Owing to the large GDP share of the tourism sector, most SIDS are deemed tourist-dependent. However, countries with high tourism dependence have not performed better in economic growth and overall well-being compared to countries that are not tourist-dependent (Elgin & Elveren, 2024). This is explained by the challenges that tourist-dependent economies face, such as little economic diversification.

In the early stages of tourist development, large-scale-all-inclusive (AI) hotels may be the most effective means to stimulate tourism growth (Mitchell & Li, 2017). As the sector grows, the development of tourism infrastructure, such as airports, can be justified. This can lead to enhanced benefits for residents due to increased tax revenue and employment opportunities. Therefore, tourism growth can directly and indirectly stimulate growth in other sectors, such as transportation, construction, and accommodation (Pratt, 2015). Although AI hotels can be beneficial in the early development stages, to attract tourists, the spending of tourists is limited outside of their all-inclusive package, indicating low tourist expenditure in local facilities (Sharpley & Ussi, 2014). Consequently, local communities are left out to benefit from tourism, due to foreign investor dominance (Chen *et al.*, 2020). Additionally, according to Mitchell & Li (2017), tourism dependent SIDS saw a decline in non-tourism related sectors, as the tourism sector grew. This is further

demonstrated as some tourist-dependent SIDS were found to have large public sectors, which crowded out private sectors (Pratt, 2015).

### Tourism dependence role in shaping SIDS economies

Dependency theory argues that developing countries, called peripheries, have political, institutional, and economic structures that do not enable them to develop independently of developed countries, called centers (Monterrubio *et al.*, 2018; Kotsis & Botsis, 2024). This suggests that there is an unbalanced power structure between centers and peripheries, which resulted from internal and external factors (Cardoso, 2009). As the degree of dependency is not only dependent on the centers, but on internal conditions of the peripheries as well (Monterrubio *et al.*, 2018). However, developed countries cannot exist without their dependent countries and vice versa (Smith, 1979). Furthermore, the negative effects of dependency can be worsened by the degree of control that peripheries have on external capital and interventions (Monterrubio *et al.*, 2018). Additionally, there is an unbalanced structure in both the developed and undeveloped countries, which is due to developed countries entering the economies of undeveloped countries (Tausch, 2010). Moreover, the product that the tourism sector offers should remain consistent over time to keep attracting tourists (Taylor, 2018). If it does not, it might be reflected through declining tourist arrivals, which will lead to losses in the tourism sector, thus minimizing economic growth. Therefore, there is increased pressure on tourist-dependent SIDS to stay consistent with their products.

Tourism can reinforce the dependency between peripheries and centers (Chaperon & Bramwell, 2013). This is exemplified as most tourist-dependent SIDS have structured their economies around the tourism sector, due to the supply and demand of SSS tourism (Peterson, 2020). As a result, this led to increased tourist development, for example, increased development of hotels and resorts, specifically near coastlines. Furthermore, the structuring of economies around tourism has led to tourism myopia, which is the short-term focus on tourism arrivals, receipts, and revenues, to fill the need for economic growth (Peterson, 2020), this could lead to negative socio-economic consequences. Dependency can be reinforced through public-private partnerships, through varieties of capitalism, which is an actor-centered approach from political economy, where actors seek ways to maximize and improve their interests by interacting with others (Hall, 2001). Using this approach, the government and foreign investors are interacting with each other, with the goal of advancing their interests. For example, foreign investments result from the lack of sustainability legislation in tourism-dependent SIDS, due to the focus on low-cost mass tourism (Dinica, 2012). Additionally, foreign investments are used to produce a viable tourist sector, resulting in reduced local benefits of tourism (Sharpley & Ussi, 2014; Puig-Cabrera & Foronda-Robles, 2019).

### Socio-economic impacts of tourism dependency

In general, tourism is viewed as an alternative for SIDS to enhance independent economic growth, which can increase standards of living (Pratt, 2015). Furthermore, the impact of tourist spending is multiplied as the money is passed from one business to the next, and it can increase indirect employment (Makhlouf, 2012). This leads to an increased economic impact in a destination. Additionally, it can lead to positive perceived impacts from tourism as product sales from local products and employment opportunities are increased; Together with an increased sense of pride in local communities and identification with their own culture. Residents in these destinations support tourism given that it helps improve income and economic status (Hung & Wu, 2017). This was further demonstrated by Puig-Cabrera & Foronda-Robles (2019) as they concluded that tourism development positively contributed to improved living conditions in SIDS. Additionally, they found that increased out-of-pocket tourist expenditures resulted in increased benefits of tourism for residents. However, this does indicate that tourism can only have a positive impact on SIDS, providing that tourists' spending is increased, and this positive impact can be minimized by AI hotels and resorts. Additionally, other positive impacts can be attributed to the tourism sector, such as contributions to the country's GDP and rapid economic growth. It can increase tax revenue as well, which leads to improvement of local infrastructure, increased quality of life, and improved poverty (Makhlouf, 2012; Puig-Cabrera & Foronda-Robles, 2019). Additionally, the tourism sector creates employment opportunities in several sectors: hospitality, transportation, management, and indirect employment in related industries, for both unskilled and semi-skilled laborers (Nagalingam *et al.*, 2019).

Although tourism can have a positive socio-economic impact on a destination, it can affect inflation and price levels. This means that the price of goods and services can increase, leaving such things unaffordable for residents (Frent, 2016). Increased food prices result from high costs associated with the importation of products to accommodate the high tourist numbers (Sharpley & Ussi, 2014; Pratt, 2015). Moreover, destinations that are high in demand can experience an increased strain on the accessibility of water and energy sources (Elgin & Elveren, 2024). This suggests that despite the positive economic impact of tourism on governments and companies, residents of tourist destinations are the ones who have to endure the negative effects. This is demonstrated by Haini & Loon (2023) as they found that tourism can promote happiness in residents, but it can become damaging when a country's economy starts depending on it. Furthermore, they argued that tourism dependency is related to crowding out of economic development, which can exacerbate the negative effects of tourism (Haini & Loon, 2023). In addition, Taylor (2018) argued that tourism is exploitative and that it benefits foreign corporations more than residents. Additionally, limited land in smaller SIDS causes land as a resource to be in high demand, leading to increased land prices (Frent, 2016). Furthermore, restricted economic diversification leads to limited career opportunities and increased migration (Taylor, 2018). Consequently, tourism-dependent SIDS often struggle with structural unemployment.

Several other negative impacts associated with tourism have been identified as well: congestion of the economy and of public facilities, increased pricing during peak travel season, and increased costs at restaurants, which locals might not be able to afford. Moreover, tourism can raise the demand for products and services and increase demand for water, food, and electricity. This can cause demand-induced inflation. Additionally, there is increased competition for resources and infrastructure. Tourism can take away resources as well, such as land, labor, and capital from other sectors that need these resources (Nagalingam *et al.*, 2019). This implies a disconnect between the idea of the destination that is marketed to tourists versus the reality of living in a tourism-dependent SIDS.

### Vulnerabilities and resilience in tourism-dependent SIDS

Tourism-dependent SIDS are more vulnerable to external shocks due to little economic diversification. External shocks can lead to negative outcomes for the tourism industry and tourism-dependent SIDS. For example, economic crises, war, security issues, epidemics, and political instability can all negatively impact the tourism industry (Mahklouf, 2012). Additionally, SIDS are more vulnerable to global market fluctuations (Burke & Cannonier, 2022; Sharpley, 2022). A more recent example would include the COVID-19 pandemic, as many tourism-dependent SIDS struggled during the lockdowns, as tourists were no longer welcome. This indicates that tourism dependency has shaped economies in such a way that it has crowded out other sectors, which translates to little economic diversification. This leaves tourism-dependent countries and their residents vulnerable, as they cannot rely on other sectors for economic growth and an improved quality of life.

The vulnerability of tourism-dependent SIDS is amplified as a result of their reliance on other countries, namely for the import of products. Previous research showed that local resources had declined, while resource consumption had increased in 14 Caribbean SIDS (del Campo *et al.*, 2023). The increase in resource consumption was caused by an increase in the number of tourists visiting these SIDS, due to both residents and tourists making use of the same resources. This indicates that resources of tourism-dependent SIDS are under pressure. Therefore, it is unlikely for SIDS to not rely on other countries. Furthermore, Taylor (2018) found that the residents of Aruba have few career options due to the focus on tourism as a primary economic driver. Therefore, most career options are related to tourism. Additionally, their economic model sets Aruba up for a certain economic path, which does not favor the economic welfare of its residents.

Although tourism dependency increases vulnerabilities in SIDS, the transaction costs of minimizing these vulnerabilities are high, which suggests that the governments of tourism dependent SIDS might not be as willing to look beyond tourism as an economic model (Roberts, 2021).

Nonetheless, in this sense, resilience can be seen as a trade-off between the survival of the tourism sector and the well-being of individuals (Roberts, 2021). Therefore, resilience is not always a positive development for residents. For instance, most resilience strategies are implemented by

business and political actors, which aim for their businesses to remain intact. However, employees or residents are often overlooked in these strategies (Roberts, 2021). Therefore, vulnerabilities of SIDS should be decreased, and resilience should be increased through economic diversification. SIDS governments play a role in this, as they have the power to impose regulations and policies.

### Government role in tourism dependence

Governments play a large role in tourism development, management, and promotion. They have the responsibility of improving infrastructure and creating regulatory systems that prevent uncontrollable growth (Makhlouf, 2012). Consistent with neoliberalism, governments aim to attract foreign investors to further develop their tourism product. However, this limits access to resources and can crowd out other economic sectors, in addition to sustaining tourism dependency. This results from weak governance, which limits the benefits of tourism for local communities. Furthermore, there is little legislation to prevent foreign investors from dominating the sector (Dinica, 2012). As a result, foreign investors continue to dominate the tourism sector, which leads to limited opportunities for residents to invest in tourism (Sharpley & Ussi, 2014). Additionally, specialization in tourism can contribute to reduced political autonomy as foreign investments determine tourist development. Similarly, foreign investors and foreign-owned corporations outnumber locally owned corporations. This can increase resource inequality, as these corporations have better access to limited resources compared to residents (Taylor, 2018). Additionally, these corporations can influence governments through regulatory capture, which occurs when regulators act in the interest of industries they are supposed to regulate, rather than the public interest (Dal Bó, 2006). Since these corporations own the largest share of tourism on the island, they can exert more power through lobbying and influencing regulations.

For instance, Aruba has created the Aruba tourism Authority, which aims to maximize tourist arrivals and tourist expenditure (Taylor, 2018). This demonstrates how governments sustain tourism dependency. Additionally, the Aruban government demonstrated tourism policy drift, which resulted in a supply and demand for tourism that is disconnected from local communities (Peterson, 2020). Therefore, institutions such as governments, the tourism sector, and foreign investors are maintaining tourism dependency in these areas (Adger, 2000). Similarly, Curaçao became an autonomous country within the Kingdom of the Netherlands in 2010. This caused Curaçao to gain more autonomy over its policies, which allowed it the freedom to focus on tourism development (IMF, 2024). This is illustrated by the contribution of tourism to the islands' GDP; as the tourism sector made up 8.1% of the islands' GDP in 2005 and increased to 25% in 2023 (Antilliaans Dagblad, 2024). Furthermore, the number of foreign owned hotels has increased, which reflects an increase in foreign investments. Travel agency Corendon owns the largest market share of Curaçao's tourism sector, in addition to TUI and KLM (Antilliaans Dagblad, 2023). This has led to criticism from local organizations; they demanded more diversity in hotel entrepreneurs, and they showed criticism against AI travel packages (Antilliaans Dagblad, 2023). In addition, local hotel entrepreneurs have expressed their concern as well, due to the

development of larger hotels (Hendriksen, 2023). Since tourists mostly opt for all-inclusive holiday packages, local hotels have lost out on profits. This illustrates on a micro level how dependency reduces the multiplier effect. To counter this, governments could increase community involvement in the tourism sector (Pratt, 2015; Capocchi *et al.*, 2019). In addition, governments can provide more protective mechanisms and promote cultural tourism. This can minimize the disconnect between the tourism sector and local communities (Nagalingam *et al.*, 2019). Governments should take control of tourism growth and development as well, through market regulation (Stoffelen & Ioannides, 2022). However, most political actors see no use in implementing alternative models or regulations, due to high competition with other islands (Taylor, 2018).

### Research gaps and study contribution

There have been several gaps identified in this literature review; Most literature does not focus on the socio-economic inequality brought on by tourism in tourism-dependent SIDS. In addition, there is little research on alternatives to tourism or how tourism-dependent destinations can transform to increase their economic diversity. As well as that, residents are often overlooked in creating resilience strategies against tourism. Furthermore, most research on tourism in the Caribbean focuses on independent SIDS and not on dependent SIDS, such as Curaçao (Peterson, 2020). There is limited research on the impact of tourism dependence and socio-economic stability as well, as most studies do not explore that on a structural level. Therefore, this research focuses on how tourism dependency influences Curaçao and how it can transform the island. In addition to looking at the socio-economic inequality, as tourism can worsen inequalities in SIDS (Scheyvens & Momsen, 2020).

### Conclusion

In conclusion, tourism growth can improve the socio-economic conditions of residents. However, governments have not taken control of tourism growth, which is reflected in the focus on AI hotels in tourism-dependent SIDS. In addition, if there is unlimited tourism growth, the benefits for residents will be minimized, meaning that tourism growth and development will not translate to improved socio-economic conditions for those who experience the most drawbacks from it. Therefore, SIDS can build economic resilience while maintaining tourism benefits through addressing the impact of tourism growth on their residents, and the failures that made them tourism-dependent. Furthermore, tourism-dependent SIDS should diversify their economies. Lastly, they should regulate foreign investments and increase the chance for residents to invest. In the following sections, the conceptualization of the key concepts, as well as the theoretical framework and conceptual model that are used to address the research questions will be discussed.

## Conceptualization

The independent variable is tourism dependence, the dependent variable is the stable state of Curaçao, including the most important actors the government and the residents; The government, as they hold the power to shape tourism. The residents are the actors who have to live through the impacts of their decisions. Therefore, the relationship between tourism dependence and the actors of the stable states will be examined.

### Tourism dependence as an independent variable

Tourism can be defined by its physical, cultural, social, economic, political, and technological dimensions (Leiper, 1979). This research will focus on the economic and social dimensions of tourism. The economic dimension includes transportation, accommodation, recreation, tourism development, and other related services. However, it can be difficult to assess whether such services are exclusively for tourists. For example, restaurants might have tourists as a large percentage of their clientele; however, that does not mean that the restaurant solely exists to cater to tourists. The social dimension is defined by the cultural and social impact of tourism on the place tourists visit. The cultural and social impact involves resentment towards tourists from residents due to their behavior and intrusion into the lifestyle of residents (Filiposki *et al.*, 2016). In addition, traditional industries may decline to make way for the tourism sector.

Tourism dependence is the independent variable of this research question. Countries are viewed as tourism-dependent if over 20% of their export earnings are related to tourism (Gounder and Cox, 2022). Thus, the tourism sector is responsible for a large portion of the export earnings for a given destination. Furthermore, tourism dependence has been defined as the relation between tourist-generating countries and tourism destination countries, as well as a dependence on the economies of the tourist-generating countries (Jafari & Xiao, 2015; Balcilar *et al.*, 2017). Therefore, investors can be introduced as an actor, who for advances in the tourism sector, will act in their own interest.

### Stable state as dependent variable

In an ecological stable state, the variables and parameters consist of mortality and birth rates, migration rates, availability of resources, and the species in the system (Beisner *et al.*, 2003). However, a socio-economic system consists of many variables, which form the dependent variable. Drawing from varieties of capitalism (Hall, 2001), the stable state is an actor-driven landscape, in which this research focuses on the government of Curaçao and its residents. As the focus is on the dynamics within the periphery. In essence, these actors symbolize the different species that cohabitate in an ecosystem. Therefore, the stable state variable consists of the top-down and bottom-up perspectives of these actors, together with their interaction with tourism dependence. As tourism dependency is influenced by internal conditions as well (Monterrubio *et al.*, 2018). These actors can influence the stable state location through their actions and behaviors; The top-down

actor influences the location through policies, regulations, and investments. The bottom-up actor influences the location through employment, resilience, and attitudes toward tourism dependency.

### Tipping Point & Resilience

The concepts relating to stable state are the tipping point and resilience. The tipping point is the point at which the system is pushed into a different alternative stable state. The idea is that tourism dependence influences the stable state of the island and its residents. For example, if there is increased tourism growth, with a strong increase in tourists in hotels and tourist services, the stable state might shift into an alternative stable state. Similarly, if tourism growth is minimized, there are fewer tourists, empty hotels and resorts, fewer flights, no employment related to tourism, then the stable state might shift. Resilience in this context refers to the ability to recover from perturbations, thus the ability to recover from perturbations caused by tourism dependence. In this case, it would mean how much tourism growth the island can take before it is forced into an alternative stable state. Therefore, it may transform into an alternative stable state when the system has reached a tipping point.

### **Theoretical framework**

This theoretical framework provides a background for the conceptual model to analyze the influence of tourism dependence on the socio-economic stable state of Curaçao. This is achieved through the integration of ecological stable state theory and socio-economic dynamics. Therefore, this framework can help explain how tourism dependence influences change within the given socio-economic system. It draws from ecological stable state theory and conceptualizes the socio-economic system as a stable state, which is influenced by perturbations, resilience, and tipping points. The key concepts in this framework are perturbations, resilience, and tipping points, which will be discussed in the following sections.

Stable states are ecological states in which an ecological system can exist; the other states are called alternative stable states. Each stable state corresponds with set parameter values and variables; therefore, if their value changes, the stable state changes (Beisner *et al.*, 2003). Thus, each stable state is limited by its own system parameters and variables (Lamothe *et al.*, 2019). The system parameters refer to the biophysical structures of an ecological system in a given space and time, such as birth and death rates, population size, and population density (Lamothe *et al.*, 2019). If these variables are maintained over time, though they might fluctuate within certain values, the stable state is considered to be in equilibrium; if it is not in equilibrium, the values will fluctuate around the equilibrium in a trajectory (Van Meerbeek *et al.*, 2021; Manhães *et al.*, 2022). Lamothe *et al.* (2019) conceptualized alternative stable states using a ball-in-a-cup analogy. Several cups of various shapes and depths were visualized in a landscape, which represent the stable state. However, only one cup contains a ball, which represents the system (Figure 2). The shape of the cup represents the interactions between the system parameters and the variables associated with that specific stable state. The depth of the cup represents the degree of difficulty for the ball to

move toward a different cup. If the cup is deep, it will be more difficult for the ball to move toward a different cup. To exemplify this analogy for the context of Curaçao, their current stable state is represented by cup b in figure 2. Movement of the ball to cup a or cup c can occur through external and internal pressures; for simplicity, cup a is a state with increased tourism and cup c is a state with decreased tourism. There are several mechanisms which can result in movement of the ball, such as government incentives, investments, and policies. For example, government policies that act in favor of tourism, which would lead to movement of the ball toward cup a. Or external pressures such as the Covid-19 pandemic would lead to movement to cup b.

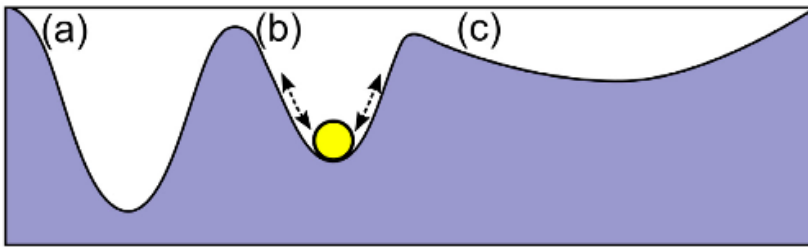


Figure 2. Visualization of the ball-in-cup analogy (Lamothe *et al.*, 2019).

Change in stable states can be viewed from two perspectives: 1) The community perspective: the landscape of the cups is constant, and only the ball can move between cups. Thus, the actions and behaviors of the actors within the stable state influence the movement of the ball. 2) The ecosystem perspective: the landscape and cups change. Furthermore, they occur due to the environmental influences that drive it (Beisner *et al.*, 2003). These changes are caused by perturbations or shocks, and they have the ability to separate the relations between the system parameters and variables, meaning they no longer influence each other, due to external factors (Donohue *et al.*, 2013). However, for an ecological system to change stable states, the perturbation needs to exceed a certain threshold. This threshold is called a tipping point (Beisner *et al.*, 2003). Therefore, if the perturbation is larger than the tipping point, the system will move toward an alternative stable state (Van Meerbeek *et al.*, 2021). The ability of a system to recover from a perturbation is called resilience (Mumby *et al.*, 2014).

Several types of resilience were identified; 1) 'Bounce forward quickly' resilience perspective from the Caribbean Disaster Management Agency (CDEMA): Focus on the urgency of Caribbean Island states and their ability to bounce back to normalcy, therefore remain in the same stable state (Roberts, 2021). 2) Transformative resilience: This enables the creation of new ecological, economic, and social structures (Roberts, 2021). However, this type of resilience has the highest transaction costs, and this could affect the willingness of governments to cooperate and invest in a new economic model. 3) Socio-ecological resilience: The ability of individual households or community members to adapt, change, anticipate, or respond to uncertainty and shocks (Roberts, 2021). Yet, the resilience of what and resilience to what are not answered. However, most forms of resilience have a similar idea; the ability to recover from whatever has happened and changed the

status quo, except for transformative resilience. Therefore, in the conceptual framework, two forms of resilience are used: transformative resilience and non-transformative resilience.

## **Conceptual Model**

The conceptual model integrates the theoretical framework with varieties of capitalism, by focusing on how the actors influence Curaçao's socio-economic stable state. The following section further describes each variable in the conceptual model to clarify how tourism dependence influences each of these variables.

### Stable states

Stable states can exist in various forms, based on the values of the system parameters and variables. For simplicity, the alternative stable states are based on high vs low tourism dependence and high vs low socio-economic stability. The locations of the stable state are determined by the system parameters and variables. These various stable states relate to the idea of bouncing forward and bouncing backward. 'Bounce forward' would mean to move from A to B or from C to D. 'Bounce backward' would mean to move from B to A or from D to C (Figure 3).

Stable state A: High tourism dependence and low socio-economic stability.

Stable state B: High tourism dependence and high socio-economic stability.

Stable state C: Low tourism dependence and low socio-economic stability.

Stable state D: Low tourism dependence and high socio-economic stability.

Figure 3 shows a visualization of the locations of the stable states, with tourism dependence on the y axis and poverty on the x axis. The most desirable stable state is a state in which the actors strive to be, depending on what serves their interests (Cote & Nightingale, 2012). The most desirable state for residents would be stable state D, as there is high socio-economic stability and low tourism dependence. While for the government, the most desirable stable state is driven by economic incentives. However, note that this is a simplified demonstration of the possible stable states that can exist. Additionally, stable states C and D can negatively impact the tourism industry, as there is little tourism dependence. Consequently, a decline in tourism infrastructure and employment follows. Thus, the most desirable stable state does not exist, only for the community or institutions that benefit the most from it, as each stable state has its benefits and challenges for those involved.

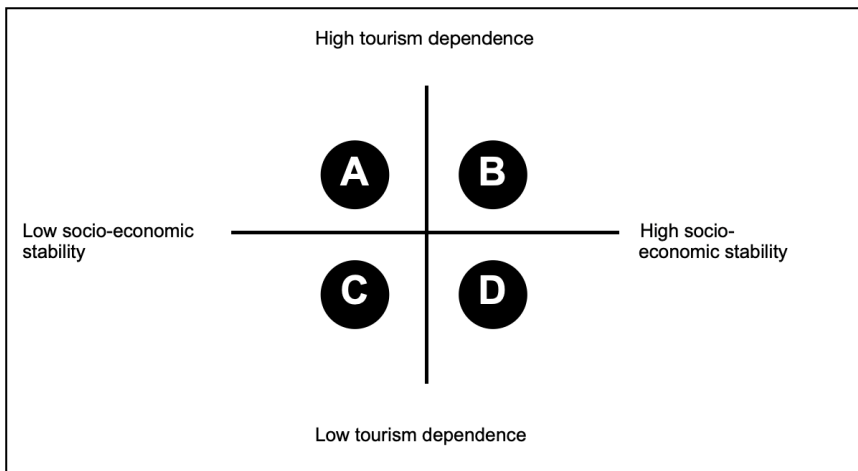


Figure 3. Locations of the stable states

*Tipping points, resilience, and perturbations*

In this context, perturbations to the stable state would be tourism dependence. Tipping points are the thresholds at where a system shifts from one stable state to another. Therefore, in this context, the system is the socio-economic stable state of Curaçao. The tipping point would be reached by external factors or perturbations, which are causing the system to tip over into an alternative stable state; Tipping points can be reached through actor-driven mechanisms as well. Therefore, the tipping point is what happens to the system, and resilience is what the individuals in the system can do to remain in the stable state or transform to an alternative stable state. Additionally, resilience is an integral part of the transformation between stable states (Hall & Lamont, 2013).

Resilience in this context is the ability of the actors to recover from perturbations. This could indicate the stable state remaining the same or a transformation of the stable state to an alternative stable state. However, the perturbation must exceed the tipping point in order for the stable state to transform, or resilience must exceed the perturbation for transformation. Therefore, in this context, three types of resilience can be identified, two of which draw from transformative resilience.

- i. Non-transformative resilience: The perturbation does not exceed the tipping point; therefore, resilience is the same as perturbation. This indicates that the system does recover, but no transformations occur.
- ii. 'Bounce backward' resilience: The perturbation exceeds the tipping point, but the resilience is smaller than the perturbation. Indicating that the stable states move toward an alternative stable state, but one that is 'worse' than the normal stable state. This indicates that the system does not recover, but transformation does occur.
- iii. 'Bounce forward' resilience: The perturbation exceeds the tipping point, and the resilience is larger than the perturbation. Indicating that the stable state moves toward a 'better' stable state. This indicates that the system recovers, and transformation occurs.

These types of resilience relate to the theoretical alternative stable states that can exist, and they relate to the community perspective of transformation in stable states (Figure 4). The figure shows a red ball, indicating the location of the stable state at stable state B. Bouncing backward would be moving from point B to point A, as indicated with the dashed arrow pointing to the left. Bouncing forward would indicate moving from point B to point C, indicated with the dashed arrow pointing to the right. The points of the hills indicate the tipping points, and resilience is indicated through the depth of the cup. As political actors in SIDS are competing with other islands in the tourism sector, they are less likely to induce structural change or implement alternative models. Therefore, it is expected that they are less likely to display forms of resilience that would lead to an alternative stable state. For residents, similar behavior is expected, as they have an economic reliance on tourism for employment and income. Therefore, the displayed resilience is expected to be in favor of tourism dependency.

The framework used for this context is an adaptation of the PESTE-type framework (Roberts, 2021). This framework helps to assess the influence of perturbations on the level of resilience: i) non-transformative resilience. ii) 'bounce backward' resilience, and iii) 'bounce forward' resilience.

- i. The context - The current stable state and initial conditions; see the description above for the conceptualized stable states.
- ii. The disturbance - Tourism's influence on the current stable state.
- iii. The capacity to deal with disturbance - The capacity within the stable state to deal with the perturbation.
- iv. The reaction to the disturbance - The reaction from actors to the disturbance.

In addition, this adapted PESTE-type framework can help demonstrate and explain the type of resilience that is exhibited by the actors in the current stable state. Furthermore, the type of resilience can help determine whether transformation would be possible.

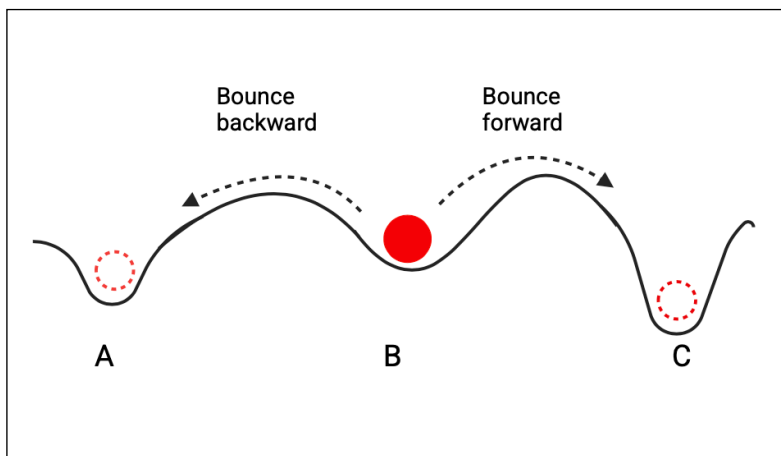


Figure 4. Visualization ball-in-cup analogy, drawing from the conceptual framework.

The tipping point indicates the threshold for transformation, which indicates that it must be exceeded for transformation to occur toward an alternative stable state. The occurrence of the tipping point is determined by the size of the perturbation and the extent of resilience. If the perturbation is higher than resilience or vice versa, the tipping point is exceeded, but if they have the same value, the tipping point is not exceeded (Figure 5). As 'bounce backward' resilience is expected, the likelihood of reaching a 'bounce backward' tipping point is expected to be more likely.

No tipping point: perturbation = resilience
'Bounce backward' tipping point: perturbation > resilience
'Bounce forward' tipping point: perturbation < resilience

Figure 5. Schematic overview of the tipping points and their values.

### Transformation and trajectories

Transformation is defined as the transformation between stable states, under the condition that one of the variables changes values. Trajectories are defined as the path that the system takes as a response to variable changes. Depending on these changes and the initial conditions, different trajectories may be followed (Manhães *et al.*, 2022). Furthermore, the initial conditions are determined by the adaptive capacity of the actors within the system, and the degree of dependency. Additionally, the initial conditions of the trajectory can determine economic and political processes (Cardoso, 2009). However, the initial conditions can create ratchet effects and institutional lock-ins, as they can reinforce tourism dependency. Thus, transformation becomes more challenging.

### Hypotheses

Based on the literature review and conceptual model, it is hypothesized that;

H1: Within the current socio-economic stable state of Curaçao, both actors; the government of Curaçao and residents of Curaçao, are highly dependent on tourism-related income. The hypothesis would be rejected if the contribution of tourism to the export earnings and GDP is less than 20%, and if the direct and indirect employment related to the tourism sector is less than 20%, which are calculated using the tourism economic dependency index (TEDI) (Ortega & Ribeiro, 2025).

H2: Higher levels of tourism dependence lead to both the government of Curaçao and the residents of Curaçao displaying 'bounce backward' resilience. The hypothesis would be rejected if the resilience that is displayed by either the government or residents is 'bounce forward' resilience or 'non-transformative' resilience.

H3: Tourism dependence increases the likelihood of reaching a 'bounce backward' tipping point through the displayed resilience and behaviors by both actors. This hypothesis would be rejected if

tourism dependence increases the likelihood of reaching a 'bounce forward' tipping point instead of a 'bounce backward' tipping point (Figure 4).

H4: Despite high tourism dependence, structural limitations, such as the type of resilience and limited capacity of both government and residents, prevent transformation to a desirable alternative stable state. The hypothesis would be rejected if there are little to no structural limitations to transformation displayed both actors; the government of Curaçao and residents of Curaçao.

#### Justification and contribution

As SIDS face several challenges, limited and finite space, as the area is a small island, little or no agricultural production, which results in high import of goods, limited development, as there is limited space, limited natural resources, limited internal financial market (De Goede and Meulens, 2009). These challenges set the stage for a stable state, as the tourism sector brings additional challenges. Furthermore, there is often a static view of ecological stable states, which is then translated into the social sciences when these concepts are used (Scoones, 1999). In other words, dynamic processes are often not taken into account. This is overcome by the conceptual model of the various types of resilience, as these indicate more dynamic processes of changing stable states. In addition, the tipping points account for dynamic processes as well. Therefore, this conceptual framework for stable states and resilience can help to answer the research question and related sub-questions. Furthermore, there are various trajectories for transformation that need to be acknowledged, together with their structural limitations. This is overcome by taking into account the trajectories and assessing them for the initial conditions. Moreover, simplistic use of dependency theory can be deterministic in suggesting that tourism development is inherently exploitative (Chaperon & Bramwell, 2013; Jafari & Xiao, 2015). In addition, dependency theory is often explained at the macro level, thus the relationship between centers and peripheries (Monterrubio *et al.*, 2018). This suggests that the focus is mostly on the unbalanced power structure between centers and peripheries; however, there is little focus on what peripheries themselves can do to break this cycle or power structure. Therefore, this conceptual model aims to be more heuristic, as this conceptual model combines political economy with an ecological framework, to illustrate potential outcomes of the relationship of tourism dependency at the micro and meso levels. Since the actors influence the stable state outcome through various mechanisms, such as investments, behaviors, and attitudes.

Tourism dependence functions as the independent variable, as it is thought to influence the stable states and transformation between them. It does not represent the stable state itself, but influences the location, thus whether tipping points are reached, resilience is displayed, and transformation occurs. The dependent variable is the stable state of Curaçao, expressed through the dependency relationship of both the government and residents with tourism. Resilience functions as the mediating variable, indicating whether or not the stable state transforms and thus reaches a tipping point. However, there are limitations associated with this framework, namely the focus on the

socio-economic dimension, as there are too many indicators and not all of them can be used. Therefore, future research could focus on other variables, and not a single variable. In addition, other actors, such as foreign investors, could be taken into account as well. Furthermore, there might be stable state variables that are currently overlooked, as they might not be included in the operationalization section. Additionally, this framework focuses on the stable state of one SIDS and thus does not focus on the interaction between SIDS. Thus the interaction between SIDS is not taken into consideration when assessing the transformation between alternative stable states.

## **Operationalization**

The purpose is to define how the key variables are measured and analyzed to ensure the validity and replicability of this study. By defining the key variables, this study can ensure that the key variables are translated into quantifiable measures. The chosen indicators allow for a mixed methods analysis, which uses regression analysis and quantitative coding.

### *Conceptual definition of key variables*

#### *Independent variable: Tourism dependence*

Tourism dependence is an independent variable. It will be measured through the tourism economic dependency index (TEDI), this index measures the economic reliance on tourism (Ortega & Ribeiro, 2025). It contains various indicators (Table 1). The tourism dependency indicators are basic indicators to measure economic tourism dependency. The adjustment indicators control for economic complexity. Qualitative indicators for tourism dependency are explained in Table 2.

#### *Dependent variable: Stable state*

Operationalization of the entire socio-economic system into one variable would be virtually impossible, as this could lead to incorrect measurement due to missing data. In this context, the focus is on variables that relate to the relationship between tourism dependence and the main actors, as the stable state consists of both the government, and residents and both actors rely on tourism in varying degrees. Therefore, if the focus is on the main actors within the stable state, there can be an increased overall understanding of how tourism dependence influences them. The main actors within the stable state are the government of Curaçao and its residents. Their relationship with tourism dependence is demonstrated through the use of resilience, tipping points, and transformation, which are further explained in the following section.

#### *Resilience, tipping points, and transformation*

Resilience is the moderating variable, as that determines whether the system will recover and transform. The type of resilience was assessed through using the adapted PESTE-type resilience framework. Furthermore, resilience is the ability to recover from perturbations; therefore, resilience can be seen as the response or ability to recover from perturbations. Additionally, Resilience is the capacity to deal with disturbances or perturbations, and the reaction to the disturbances. For example, migration due to better opportunities in other countries (Adger, 2000). Therefore,

qualitative measurements for resilience would be responses to or recovery from perturbations. Additionally, tourism dependence impacts the stable state in other ways as well. These are described in Table 2 and are taken from the literature review. These impacts were taken into account when assessing the resilience. The resilience is the ability to recover from perturbations; however, it is more difficult to assess the recovery from tourism dependence alone. Therefore, the impacts of tourism dependence are used in order to generate resilience indicators (Table 3). Thus, the impact has been identified in the literature review, and the qualitative measures have been described in Table 3. Similar to the indicators for transformation, which have been described in Table 3 as well. The tipping point is the threshold variable, which indicates the point at which a system moves toward an alternative stable state. The tipping point is the point in which the parameters net change is larger than zero, which determines the tipping point in a qualitative time series analysis. The tipping point only occurs in that situation. Thus, the tipping point is determined by the size of the perturbation and the extent of resilience. Transformation between stable states only occurs if the tipping point is reached. If the perturbation is higher than the resilience or vice versa, the tipping point is exceeded, but if they have the same value, the tipping point is not exceeded.

### Justification

The independent variable of tourism dependence was determined through the use of TEDI, a quantitative measure of tourism dependence (Table 1). Resilience indicators can be justified as a response to the impact of tourism dependence, taken from the literature review (Table 3). However, the operationalization cannot fully capture the extent of resilience in residents of Curaçao, as there are multiple approaches to measuring resilience, each with its own drawbacks. Additionally, the cultural context of countries is overlooked in resilience questions (Adger, 2000). This was overcome by taking the local context into account, for example taking migration as a measure of resilience, as this takes into account the local context of Curaçao being a part of the kingdom of the Netherlands. Thus making migration to the Netherlands easier.

**Table 1**  
*Overview of TEDI indicators and their definition*

<b>Tourism dependency indicators</b>	<b>Definition</b>
C1: Percentage of contribution of tourism to GDP	The share of tourism to GDP
C2: Percentage of tourism employment as a share of the total employment	The share of direct employment in the tourism sector
C3: Percentage of tourism export of the total exports	The share of tourism exports
<b>Adjustment indicators</b>	
C1: Manufacturing Value Added per capita (MVA index)	Industrial productivity and development of a country
C2: Percentage of industry employment of total employment	The share of employment in the industrial sector
C3: Percentage of high tech exports of total exports	The share of global high tech exports

**Table 2**

*Overview of the impact caused by the dependence on tourism. Taken from the literature review*

<b>Dimension</b>	<b>Impact factor</b>	<b>Description</b>
<b>Social impact</b>	Decline in traditional industries	Over dependence on tourism can lead to less diversity in industries
	Structural unemployment	Structural unemployment due to limited career opportunities
	Dependence of foreign investors	Foreign investors dominate the tourism sector, which limits residents' opportunities
<b>Resources impact</b>	Increased resource consumption	Tourists and locals compete for the same resources (water, electricity, and infrastructure)
	Resource inequality	Domination of foreign investors in the tourism sector, creating income inequality
<b>Economic impact</b>	Limited career options	Reduced job diversity due to an over reliance on tourism
	Economic path dependency	Due to an economic reliance on tourism, which restricts shifts to other industries
	Increased costs of living	High demand in tourism has increased the costs of goods and services

**Table 3**

*Overview of indicators for resilience and transformation*

<b>Resilience</b>	<b>Indicator</b>	<b>Definition</b>
	Economic vulnerability and stability	Economic vulnerability of residents caused by tourism dependence
	Resilience (reaction to disturbance)	Social or community resilience exhibited by residents of Curaçao
	Capacity to deal with disturbances	The adaptive capacity of residents when faced with the impact of tourism
<b>Transformation</b>	Advantages of tourism	The economic benefits of tourism
	Barriers and enablers of tourism	The barriers and enablers from tourism that inhibit or encourage change
	Alternatives to tourism	Alternative forms of tourism/ alternatives sectors

## **Methodology**

The purpose of this section is to illustrate the methodology of this study of this research. The chosen methodology is suitable to answer the research questions. The following components will be discussed: research design, data collection methods, and data analysis.

### Research Design

The research design consists of a mixed methods approach, using both quantitative and qualitative data. The reason for a mixed methods approach is due to the possible limitations in data availability, as this is a case study. Therefore, a mixed methods approach can help ensure that the findings can be cross-validated and ensure more valid and reliable results. This study is a case study based on the island of Curaçao. Therefore, this methodology could be applied to other tourism-dependent SIDS as well.

### Data Collection Methods

#### *Primary Data*

The primary qualitative data consisted of interviews with the relevant stakeholders, including, but not limited to, experts on tourism and governance, residents of Curaçao, and hospitality experts. The interviews helped to create data that was not available through datasets or articles as well. The interviewees were contacted through email for participation; the email included an information sheet and the informed consent sheet. All interviews were conducted through Microsoft Teams, and they were recorded and transcribed using verbatim transcription to fully capture everything that was said by the interviewees. The sample size for the interviews consisted of nine interviewees. Although this sample size is small, the interviews were semi-structured, which allowed for more in-depth interviews. In addition, this helped for interactive interviews, as this enables to probe deeper on to what was said previously by the interviewee to gain more insight in their perspectives on a particular question. Thus, producing a richer data set. The participants were selected through convenience sampling and snowball sampling. Inclusion criteria consisted of individuals who have a connection to Curaçao, for instance, residing there. Or individuals who have differing opinions regarding tourism on the island as to minimize bias. The participants ranged from being (former) residents, experts on governance, and tourism entrepreneurs.

#### *Development of the interview guide*

An interview guide was developed based on an article on qualitative research interviews (Qu & Dumay, 2011). The questions for the interview guide were based on the themes discussed in the sub-questions, the literature review, and the framework. The key themes that were discussed included: tourism dependence, the challenges and benefits of tourism, transformation, and the barriers and enablers of transformation, and alternative scenarios. The questions were open ended to ensure more in depth answers and insights shared by the interviewee. The interview guide can be accessed through Appendix C. Additionally, the interview guide strived to remain neutral in the interview questions, to avoid bias, and not to favor certain answers over others.

#### *Secondary Data*

The secondary quantitative data consisted of the tourism dependence indicators and the stable state indicators (Table 1). The data was taken from public data sets, such as available data on the

website of the Central Bureau of Statistics Curaçao or the website from the Curaçao Tourist Board. Additionally, websites such as the data world bank could also be used to obtain the data. This data was obtained through desk research, as well as the qualitative data.

The secondary qualitative data was obtained through news articles, governments, and institutional reports. The secondary qualitative data consisted of news articles, ranging from three major news outlets in Curaçao: Curaçao.nu, Caribisch netwerk, and Antilliaans Dagblad. These were chosen as they are most likely to capture the events occurring on Curaçao, as two of them are local news outlets. Other news sources included NOS. This type of data was chosen as there is limited access to primary data, namely due to time and financial constraints. The sample was sufficient to reach saturation, and it represents multiple perspectives related to tourism dependence, which helps decrease bias in the sample. Additionally, the use of news articles helped capture the events on Curaçao, as they are time-sensitive. Therefore, this type of data was still sufficient to answer the sub-questions. The data was selected through purposive sampling, using several different search terms all relating to the impact of tourism in Curaçao, tourism in Curaçao, socio economic stability of Curaçao, and responses to tourism in Curaçao. See Appendix B for an overview of the qualitative and quantitative sources that were used.

Furthermore, the inclusion criteria were that the source must mention Curaçao or other tourism-dependent SIDS, They needed to contain mentions of the appropriate actors: the government and residents of Curaçao. Additionally, they need to be written in English or Dutch and published by credible sources. Exclusion criteria included that the article did not mention both or either actors, or if sources lacked reliability. The time frame for the data was 2015-2025, as before 2019, Curaçao had multiple pillars in its economy, and after 2019, they did not. The data collection stopped when, during the data analysis a saturation point was reached, and new data did not provide new insights.

### Data Analysis

Each of the sub-questions was analyzed through both top-down and bottom-up perspectives to capture the stable state in a more comprehensive manner, thus including the perspectives of the most important actors.

The degree of tourism dependency was calculated using the tourism economic dependency index (TEDI). This index contains adjustment factors, which account for economic complexity, as not every tourism-dependent destination has little economic diversification (Ortega & Ribeiro, 2025). Changes in TEDI were identified and measured through a time series analysis and regression analysis in R. See Appendix A for a full overview of how TEDI was calculated and how missing data was handled, as TEDI requires data for three components; however, no data was available for one of the components.

The second, third, and fourth sub-questions were analyzed using thematic analysis. The qualitative coding consisted of a combination of inductive and deductive coding, as some of the codes were predetermined and the other codes were created based on the data (Braun & Clarke, 2013). The predetermined codes made sure that the data would be more consistent, and the rest of the codes flowed as the coding went on. To ensure inter-coder reliability, the data was coded in multiple rounds. The first round of coding consisted of highlighting the secondary qualitative data and grouping them into the predetermined codes. The later rounds of coding consisted of refining the code names and regrouping certain code excerpts under different code names. Each code excerpt was summarized to further define and assess the excerpt and to ensure it was placed under the appropriate code. Inter coder reliability was further ensured through the use of inclusion and exclusion criteria for each of the codes, and through the use of definitions of the predetermined codes. After the qualitative coding was finalized, the codes were grouped into predetermined themes (Caulfield, 2023). An overview of the themes and their definitions is shown in Table 2. The themes for the sub-question four were based on the themes of the interview guide, the literature review, and the conceptual model. However, there was room to develop additional themes, as the chosen approach was a combination of inductive and deductive coding. Additionally, a latent approach was chosen, which means reading into the assumptions and subtext of the data (Caulfield, 2023). An overview of the themes and their definitions is shown in Table 3. The full codebook can be accessed in Appendix D.

#### *Reliability, Validity, and Ethical Considerations*

Validity of the research was ensured through the use of indicators that are based on the theory and conceptualization of the independent and dependent variables. Furthermore, all sub-questions address the concepts referred to in the main question. The use of an established conceptual model should ensure validity as well. The model addresses all the mentioned concepts. The reliability of the research was ensured through the data collection process by using secondary data from reliable sources. Those sources include government websites and scientific literature. To further ensure reliability through triangulation, multiple data sources were used to assess the same variable. In addition, the research methodology was documented clearly to secure reproducibility of the results. Moreover, the use of an interview guide for the primary collective data should ensure reliability as well. Inter-coder reliability was ensured by coding some articles a second time to ensure the same themes and codes would emerge. Additionally, the codebook contained inclusion and exclusion criteria for each of the codes. The number of qualitative data is dependent on the saturation point, and data collection stopped when a saturation point was reached. The saturation point was set at the point where no new themes would emerge.

The use of primary data can lead to ethical considerations. This was prevented through the use of an informed consent sheet for interviewees. This contains information on the purpose of the study, the procedures and risks. Written consent was obtained before participation in the interviews. Furthermore, participants were allowed to withdraw at any time without consequences. The participants' identity was protected through anonymization of the primary qualitative data.

Therefore, the interviews cannot be traced back to the individuals participating in the interviews. Additionally, the data is stored in a private manner.

## Results

### Measuring tourism dependency in Curaçao

Table 4 shows the TEDI values per year, from 2012 to 2023, and Figure 6 shows a line graph of those values. In both the table and figure, it can be seen that TEDI increases from 2012 to 2019, with a decrease in 2020, which can be attributed to the COVID-19 pandemic. COVID-19 lockdowns resulted in a decrease in GDP, hence the TEDI dropped as well. However, in 2021, there was an increase in the TEDI value, with the TEDI increasing to over 40% in 2022 and 2023. These values are also indicated in Figure 6 for a visual representation of the changes in TEDI over time. The red line indicates the 20% threshold, as TEDI over 20% represents tourism dependency (Ortega & Ribeiro, 2025). Therefore, the High TEDI values suggest that other economic sectors on the island are limited, thus indicating a mono-economy. This sets up the initial conditions, as Curaçao is highly tourism dependent.

**Table 4**

*Tourism Economic Dependence Index (%) values per year (2012-2023)*

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
TEDI	24.6%	29.0%	30.7%	31.8%	32.0%	31.2%	32.5%	38.7%	24.9%	32.3%	46.1%	43.3%



Figure 6. The Tourism Economic Diversification Index of Curaçao, per year (2012-2023).

All TEDI values represented in Table 4 and Figure 6 are over 20%; therefore, the contribution of tourism to export earnings and to the GDP is over 20%. However, there was no available data for the direct and indirect employment related to the tourism sector. Therefore, it cannot be said that the employment share is over 20%, as the C2 component could not be calculated due to

unavailable data for C2. This component consists of the employment data. Therefore, this TEDI displays an adjusted TEDI value, as the employment data was not taken into the calculation of TEDI. In 2020, there is a downward line, indicating that TEDI decreased, which is due to the COVID-19 pandemic. This suggests that the TEDI components also decreased, namely GDP and tourism expenditure. Therefore, a regression analysis was performed, with TEDI as the dependent variable and the year as the independent variable. This was done in order to assess the differences between the TEDI values before 2020, when the COVID-19 pandemic occurred, and after. Table 5 shows the results of all regression analyses.

The regression determined that TEDI has changed significantly over time, indicating increased tourism dependence. Thus indicating a relationship between TEDI and time. Before the COVID-19 pandemic in 2020, TEDI had increased significantly over time ( $\beta = 1.40$ ,  $p = 0.004$ ,  $n = 8$ ). 77% of the variation in tourism dependency can be explained by time. This indicates that the economic dependency on tourism grew in the years leading up to 2020. After 2020, TEDI increased as well, demonstrating increased tourism dependency. However, this relationship was not statistically significant ( $\beta = 6.9$ ,  $p = 0.0948$ ,  $n = 4$ ), which could be explained by the small number of observations after 2020. Although this suggests that tourism dependency increased after 2020. Comparing TEDI from before 2020 and after 2020, there is a significant difference in trends ( $p = 0.00571$ ). Before 2020, TEDI growth was more gradual, while after 2020 the slope became steeper. This suggests that after 2020, tourism dependency increased more compared to before 2020, thus indicating that TEDI grew faster after 2020. Though this could be explained by economic recovery rather than structural tourism dependency. Therefore, GDP and Tourism contribution to GDP (TCGDP) were assessed to determine what explains the steeper slope after 2020 in TEDI. Both GDP and TCGDP increased faster after 2020 (Table 6). TCGDP's slope after 2020 became steeper, suggesting tourism recovered quickly after COVID-19, which is reflected in TEDI. Before 2020, TCGDP grew more slowly, which was seen with GDP as well. This suggests that after 2020, the economy recovered quickly, as well as tourism recovering quickly, as this accounts for a large part of the GDP.

**Table 5**  
*Regression analysis of TEDI values over the years 2012-2023*

Variables	Slope ( $\beta$ )	Std. Error	t-value	p-value	R <sup>2</sup>	Adjusted R <sup>2</sup>
TEDI	1.2507	0.4184	2.99	0.0136 *	0.4719	0.4191
TEDI before 2020	1.4036	0.3134	4.479	0.00420 **	0.7698	0.7314
TEDI after 2020	6.90	2.29	3.013	0.0948	0.8194	0.7291
Interaction model (before and after 2020)	6.900	1.389	4.966	0.00571 **	0.8371	776

**Table 6***Regression analysis of GDP and TCGDP in an interaction model*

Variables	Slope ( $\beta$ )	Std. Error	t-value	p-value	R <sup>2</sup>	Adjusted R <sup>2</sup>
GDP	2,59E+11	1,223E+10	21.17	2.60e-08 ***	0.9845	0.9787
TCGDP	1,097E+04	4,756E+02	23.06	1.33e-08 ***	0.9907	0.9872

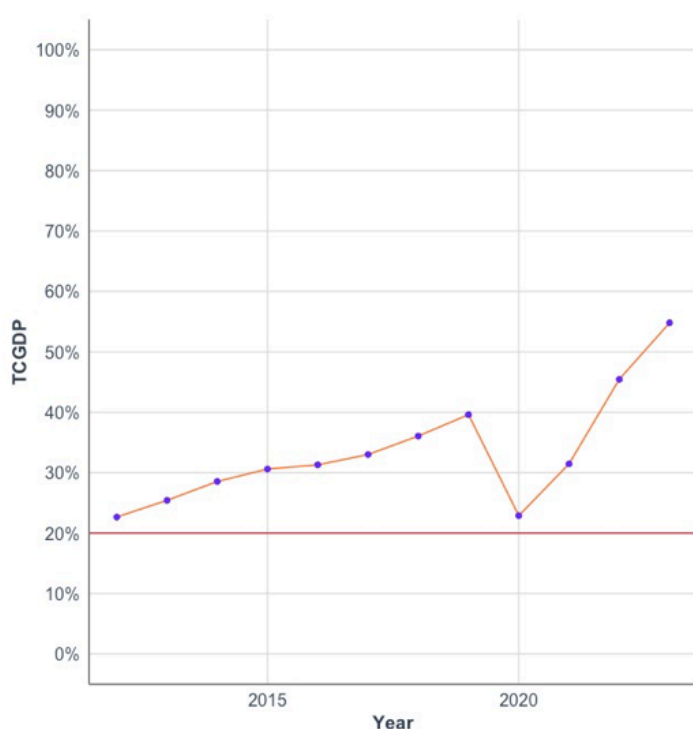


Figure 7. The contribution of tourism (%) to the GDP of Curaçao per year (2012-2023).

Figure 7 displays a line graph of the contribution of tourism to the GDP of Curaçao. The red line indicates the threshold of 20% to which a destination is considered tourism dependent. The share of the contribution to tourism has been consistently over 20% as shown in Figure 7. However, until 2019, Curaçao had a diversified economy; therefore, until 2019, the country cannot be considered tourism dependent, as it had other industries and economic pillars, such as an oil refinery. Thus, the increased growth of TCGDP could be explained by the limited economic sectors on Curaçao and the recovery of tourism after COVID-19.

The hypothesis is partially accepted. The TEDI values all exceed the 20% threshold, thus indicating that the contribution of tourism to the export earnings and GDP is over 20%. However, this cannot be said for the direct and indirect employment related to the tourism sector, as this data was unavailable. Although it is likely that the current socio-economic stable state of Curaçao is

dependent on tourism-related income, this cannot be said for residents, as the employment share data was not available.

### *Resilience and adaptive capacity in Curaçao*

This section presents the results from the thematic analysis of the secondary qualitative data to examine the extent of tourism dependence influencing the resilience within the stable state of Curaçao. Through thematic analysis, four themes were found, which will be discussed below.

#### 1. The current stable state

This theme illustrates the initial conditions of the current stable state as described in the PESTE-Type framework, and determines the location of the current stable state. This theme is composed of five sub-themes: 1. “Economic vulnerabilities of communities” illustrates the economic vulnerability experienced by the communities residing on Curaçao. It includes the extent to which communities are at risk of economic vulnerability, due to a one-pillar economy, unemployment, or income insecurity. 2. “Economic vulnerability of individuals and households” illustrates the economic vulnerability on the individual and household level. It includes the extent to which individuals or households are at risk of economic instability. For example, due to low income, unemployment, high costs of living, or limited access to essential goods and services. 3. “Employment” addresses the employment opportunities and unemployment in Curaçao. In addition to analyzing how these factors shape economic vulnerability on a household and individual level. 4. “Income inequality” illustrates the income inequality experienced by residents in Curaçao. It demonstrates the uneven distribution of income, which can lead to differences in standards of living, limited access to resources and economic opportunities. Additionally, it helps to increase the understanding of economic vulnerability experienced by individuals and households, as well as communities. 5. “Education” represents the formal and informal education on Curaçao. It includes access to education, the dropping out of education, and the role of education in social and economic development.

#### 2. Tourism’s influence on the current stable state

This theme describes tourism’s influence on the current stable state. In addition to analyzing how it affects the type of resilience, through describing tourism as a disturbance to resilience as described by the PESTE-type framework. It consists of three sub-themes: 1. “Tourism sector” explores the role of tourism in the economy, as well as explaining the influence of the tourism sector on the current stable state. 2. “Tourism development” demonstrates changes in tourism infrastructure and capacity. 3. “Economic growth” illustrates how tourism growth and economic growth have shaped the current stable state of Curaçao.

#### 3. Resilience

This theme illustrates the responses to perturbations by the residents of Curaçao, which demonstrate the reaction as described by the PESTE-type framework. It is comprised of three sub-

themes: 1. “Non-transformative resilience” illustrates the behaviors and thoughts toward tourism and its associated perturbations, which result in limited or no structural change. 2. “Bounce backward resilience” highlights the displayed resilience, which results in a less desirable stable state, for example, a pro-tourism stable state. 3. “Bounce forward resilience” illustrates the behaviors and thoughts toward tourism and its associated perturbations, which lead to a more desirable stable state.

#### 4. Perceptions influencing resilience

This theme explains how the perceptions of tourism by residents can influence resilience, as well as tourism dependence, which shows the capacity as described by the PESTE-type framework. It consists of three sub-themes: 1. “Perception of tourism” explores the perceptions of residents toward tourism. 2. “Perceived impact of tourism development” highlights the perceptions of residents toward tourism development. 3. “Trust in government” explores how residents’ trust in government influences the type of resilience that is most commonly expressed. Collectively, these themes explain and analyze the extent of the influence of tourism dependence on the type of resilience.

#### Theme 1: “The current stable state”

##### *“Economic vulnerabilities of communities”*

The results, supported by news articles, demonstrate that poverty is regarded a nationwide challenge. Yet, government responses have been insufficient. This is exemplified as a news article described:

Year in, year out, poor neighborhoods receive no attention, causing their situation to become increasingly deplorable. An anti-poverty program from a few years ago that was never completed, the discontinuation of the project that should have brought relief, the failure to fulfill promises of assistance ... all of this causes one neighborhood after another to sink deeper into poverty (Koopman, 2025, para. 2).

This example suggests that the government underfunded efforts to reduce poverty. In addition to offering insufficient aid and attention to communities, this reinforces economic vulnerability within these communities. Furthermore, insights given by residents demonstrate that the rising costs of living against income that doesn’t increase. Although the government provides state pensions, which are approximately 850 guilders (\$400) per month. These state pensions aren’t sufficient to provide basic needs, as the cost of living increases.

Another news article, on poverty becoming more apparent on the island, described:

Curaçao was already expensive, but now, during Covid, groceries have become unaffordable, ‘We live on credit. I am in debt everywhere. Every month I decide which bill I will pay and which one I won’t. I have even borrowed money now just to buy groceries. I bought two food vouchers together worth 300 guilders, at the end of this month I have to pay back 348 guilders. I don’t

know how yet. We are running the center now with just the two of us. Each of us works twelve hours a day. I can't afford a cook, so I cook for the people myself' (Drayer, 2020, para. 10). This example was taken from the experience of a care facility employee, which highlights the structural issues that community centers and care facilities face with economic vulnerability. This extends into other issues as well, such as debt and overworked employees of local care facilities. Together, these examples demonstrate the effects of underfunding, which results in limited financial aid for communities. Though this is required for low economic vulnerability. Thus, these findings reveal how structural underfunding of local facilities limits the ability of communities to self-organize and provide support to neighborhoods. Although local initiatives do exist, they're insufficient in mitigating the structural issues that communities on the island face. Therefore, economic vulnerability is present within communities.

#### *"Economic vulnerability of individuals and households"*

The results suggest that financial insecurity is widespread, namely through low incomes and increased costs of living. In addition, individuals face employment instability as day laborers on the island only receive income if there is work. Other individuals struggle with age discrimination, as some employers favor younger individuals for the same line of work in formal employment, regardless of their skills. Moreover, many individuals are forced into debt as social security on the island is nonexistent. This was emphasized by interviewee 9 (July 22, 2025), when speaking about the mismatch between income and cost of living:

And if you then look, their salaries are lower than here in the Netherlands. But the things in the supermarket are more expensive. And not just things in the supermarket, just things to buy in general. Simple things like shoes. Now I know that they import a lot from America or Venezuela, right, but all of that also has to be transported to the island. That all costs money, so relatively everything they buy is more expensive.

Although high costs of groceries and other goods could be explained by the import costs associated with them. The mismatch between salaries and the high cost of living is illustrated, which is exacerbated by the dependence on imports. Additionally, elderly residents on the island are economically vulnerable, as state pensions are insufficient to cover their basic needs. Some elderly residents reported that they cannot afford their medication. As a result, some elderly residents continue to work in informal employment. This is exemplified as a news article on increased poverty described: "Grandma receives a state pension of 400 euros per month. At 76 years old, she irons clothes for other people to make ends meet. That too has fallen away because of Covid." (Drayer, 2020, para. 4). Although this example occurred during COVID-19, it is still relevant as the situation has not improved much since then. Additionally it shows how individuals are at risk of being economically vulnerable, regardless of age. These structural inequalities are further demonstrated as well, since approximately 30% of the population lives below the poverty line, and approximately 80% earn less than the income needed to cover the living wage. This gap between income and cost of living results in decreased abilities and capacity to deal with shocks,

such as unemployment, illness, or economic downturns, leaving individuals and households on the island more economically vulnerable.

### *“Employment”*

The results, supported by interviews and news articles, indicate that the value of tourism on employment is overestimated, as most employment opportunities within tourism are minimum wage, which is insufficient given the high cost of living. The minimum needed to cover basic expenses on the island has been estimated at 3000 guilders, while minimum wage employment earns half of that (Interviewee 1, personal communication, July 4 2025). This increases economic vulnerability as these individuals do not make enough money to sustain their livelihoods. Additionally, employment within the tourism sector can contribute to economic vulnerability. Although the creation of employment through tourism has been described as a positive development, specifically for youth, youth unemployment has increased. If youth does work, they mostly receive temporary contracts. This makes them vulnerable to economic downturns, as they would be the first group to be laid off. This highlights that income and employment insecurity are structural issues on the island.

Furthermore, there is a lack of incentives to increase the minimum wage on the island, which further adds to economic vulnerability. This could be a factor as to why the tourism sector struggles attracting employees, since the minimum wage is insufficient as the costs of living have increased. Simultaneously, the tourism sector is growing rapidly, suggesting that the sector cannot keep up, as the demand for staff is higher than the local supply. As a result, the tourism sector relies on migrant workers from other islands or countries within the region. As it is described by a column on over tourism: “The added value for employment is heavily overestimated. It concerns low-skilled work at minimum wage for which labor is imported from the region, which in turn increases the shortage of affordable housing.” (Dossier Koninkrijksrelaties, 2024, para. 5). This demonstrates that the reliance on migrant workers creates additional challenges, for instance, in the housing market.

This is further described by interviewee 3 (July 7, 2025):

They are bringing in people from outside. Officially, it is for a three-year contract. After that they are supposed to return to their country of origin. Whether that is Jamaica or Colombia, it doesn't matter. But of course, those people don't go back. They come from a poor country, they come here to work, and they don't return anymore. So at a certain point, when tourism dips again, then you are left with those people as well. Then the number of job seekers is simply larger. You don't have work for them, that's a problem.

Therefore, low-income employment leaves households and individuals more economically vulnerable. Economic downturns can exacerbate this, as layoffs are more likely, resulting in individuals seeking alternative forms of income, for example, through informal employment.

### *“Income inequality”*

Through government reports and news articles, it was found that income inequality on Curaçao has increased. As one article, on economic growth in Curaçao, mentioned: "The most common measure of income inequality, the Gini index, in Curaçao has increased from 41.5 percent in 2011 to 46.0 percent in 2023." (Mak, 2025, para. 2). This growth reflects both high and low income groups, while the middle class remains underdeveloped. Differences between neighborhoods have increased as well, namely in education and income level. Furthermore, income inequality is linked to relative poverty, which on the island is estimated at 1 in 4 households. For example, in 2018, a household consisting of two parents and two children should have an estimated income of around 2100 guilders; in 2011, 25% of the households were below that minimum (Overheid van Curaçao, 2017, p.08). This further suggests little mitigation and government responses regarding poverty, as relative poverty increased. These examples demonstrate the economic vulnerability of individuals and households related to income inequality. Thus, this increases economic vulnerability of low-income earners and reduces their capacity to deal with and manage shocks, such as unemployment.

### *“Education”*

The results, taken from news articles and government reports, illustrate that Curaçao has few residents with higher education, which is a result of two factors. i) Brain drain, which results from limited higher education and limited employment opportunities, and ii) early high school dropouts, which are linked to economic vulnerability. This is further explained as a news article mentioned: "Entire families are thrown off balance as a result. Children drop out of school and start working to help provide for the needs at home." (Koopman, 2025, para. 4). This example illustrates that children discontinue attending school in order to support their households. Potentially resulting in children not finishing school and the risk of ending up in criminal circuits. This demonstrates that on a household level, the consequences of poverty and economic vulnerability extend further, as it increases path dependency.

This can be linked to the earlier findings of employment, as many low-wage employment opportunities require no formal education. This indicates that education can add to the economic vulnerabilities of residents, since residents without higher education lack employment opportunities. This suggests a vicious cycle, as no higher education means low-income employment. This is further limited, as the biggest sector for employment is the tourism sector, which limits career options. This suggests that employment opportunities add to income insecurity and employment insecurity, which adds to economic vulnerability. Therefore, economic vulnerability at the individual, household, and community levels is high. This results from limited employment opportunities, low income, and income inequality, which exacerbate poverty on these levels. Additionally, the government does little to mitigate these issues, as this is demonstrated by the lack of funding and limited social security.

## Theme 2: “Tourism’s influence on the current stable state”

### *“Tourism sector”*

The results, supported by interviews and news articles, reveal that tourism accounts for 48% of the foreign exchange inflow in Curaçao, in addition to contributing 24% of the GDP. Furthermore, government income from tourism is estimated at 21.4% of its income, indicating that tourism provides a large portion of government income. The economic impact of tourism is further expanding, as the revenue per available room (RevPar) has increased, together with an increase in visitor numbers. In addition, tourism has become a desired product reflected by the increase in the RevPar and high demand for rental cars, and restaurant revenue. This growth attracted investors to the island. However, many project developers and investors have been found not to contribute to the socio-economic costs of their projects, suggesting little contribution to socio-economic benefits for the island. Despite the high profit margins of their projects, which are estimated at 20% to 40% (Van den Bergh, 2024). These numbers highlight the lack of government regulation, since few regulations to prevent profit streams leaving the island exist, and tourism can grow unregulated.

Furthermore, an opinion article described:

Various ministries incur direct and indirect costs for tourism. Due to the fragmentation, there is no overall picture of what the government spends on tourism. The idea is that these public investments and other expenditures on tourism are substantially less than what tourism generates for the government. (Van den Bergh, 2024, para. 3)

This quote describes that the associated costs of tourism are likely higher than the generated revenue for the government. This suggests a lack of government understanding of the impact of the tourism sector on the stable state, as they seem to be unaware of their tourism expenditure. Additionally, this demonstrates the size and extent of the tourism sector in Curaçao, and how it is woven into society and the governing process, as the government’s income is largely dependent on tourism. Therefore, it would be in their interest to remain focused on tourism growth. However, the contribution to government income is not reflected in their poverty and income inequality, as most individuals rarely benefit from tourism. These examples highlight that tourism has a substantial economic impact and further illustrate the effect of a mono-economy. Therefore, the current stable state is heavily influenced by the tourism sector, although the benefits are not distributed equally.

### *“Tourism development”*

The news articles, government reports, and interview findings show several examples of government collaboration with international investors to enhance and improve the tourism product and its associated infrastructure. For example, collaborations for the development of new hotels. As increasing the number of potential visitors contributes to economic growth. For instance, local organizations, such as CHATA, invited international travel agents and real estate brokers. They were guided and advised to strengthen Curaçao’s position on the tourism and investment market

(Drayer, 2025). Furthermore, the government had created a tourism master plan in 2015, together with the Ministry of Economic Development (MEO) supervising the master plan. This illustrates that tourism is seen as important for the economy, income, and employment, which results in tourism affecting the stable state. However, a positive influence on income and employment is not reflected in the current stable state, signaling a disconnect between development initiatives and local socio-economic benefits.

Moreover, a news article on tourism development described that: "The government of Curaçao is working together with the tourism board and various investors to develop the Zakito area. This project ... The View Resort & Marina in Zakitó ... stretches from the entrance at the Aqualectra utility company to the World Trade Center building in Piscadera. The plans focus on improving infrastructure and expanding the tourism offerings." (Drayer, 2025, para. 2). This exemplifies the governments aim to collaborate with international investors for tourism infrastructure development and improvement. This signals that the government is willing to further expand tourism. Similarly, the Curaçao Tourism Board (CTB) invested in the development of the Zakito area, or Koredor, in 2022. The aim was to develop it into a recreational area that could be used by both tourists and locals, which suggests that most infrastructural developments are designed for tourists. In May of 2023, the government gave the building permits for the development of a Marina in Zakito. However, this was met with concerns from locals regarding the environmental impact. In addition to these concerns, interviewee 3 (July 7, 2025) described:

Those are high-rise apartment blocks ... much taller than what was permitted. It's likely the minister was paid under the table, since the excuse was, 'sorry, we didn't notice.' I jog in that area, along what's called the Koredor ... five kilometers, three times a week. While running, I could easily count the floors: one, two, three, fourteen. But the permit only allowed nine."

This account illustrates the unregulated development and potential corruption, as it seems that developers have unlimited freedom to develop on the island. Together, these examples illustrate the effects tourism development has on the stable state and the role the government plays in tourism development. In general, tourism development in Curaçao is led by the government to expand and improve the tourism product. However, the examples indicate there is limited regulation and unequal distribution of socio-economic benefits, along with disregards for concerns from residents. This reinforces a pro-tourism stable state, leading to increased dependency. Thus limiting 'bounce forward' resilience.

### *"Economic growth"*

The government of Curaçao prioritizes tourism as its main economic pillar, thus enhancing economic growth. This is further demonstrated as other economic pillars on the island have declined or disappeared. A 2015 government report mentioned: "Tourism will continue to be an important basis for the economy and will be supported through the execution of the 2015 Master Plan and its outline of early priorities, including increased airlift, marketing and investment in soft

skills.” (Government of Curaçao, 2015, p.15). This suggests that as early as 2015, the role of tourism was expected to become more important, namely, to economic growth. Specifically, considering the economy took a downturn during COVID-19, which explains their focus on tourism after the COVID-19 pandemic. Although tourism can be used as a vehicle for achieving economic growth, there’s a duality in the impact of tourism in daily life, as described by interviewee 5 (July 14, 2025):

Tourism is, of course, a way to make money ... and we genuinely enjoy it. We want visitors here all the time. But there comes a point where it tips over, where it goes too far. In the past ten years, we’ve had about five of those moments ... I might be exaggerating a little. In a way, it’s positive because you can see that we finally have hotels, and the restaurants have changed as well.

This quote indicates that, while tourism can positively influence the stable state, the negative influences of tourism overgrowth shouldn’t be ignored. However, since tourism growth contributes to economic growth, it would be in the governments interest to develop approaches for tourism growth and development.

### Theme 3: “Resilience”

#### *“Non-transformative resilience”*

The results, supported by interviews and news articles, found that discussions and public debates regarding tourism development exist. As interviewee 2 (July 3, 2025) explained: “With the increasing number of tourists, there is growing discussion about what constitutes an acceptable level of tourism. These kinds of debates are especially common among those concerned about the impact of rising tourism on the island.” These discussions appear on TV talk shows and radio programs, where concerns are voiced on tourism employment. However, these discussions are occurring among individuals who are worried about tourism growth, which could indicate that other individuals might not have these discussions. Or they’re not included in them, or they do not care for these discussions. Thus, these discussions might be limited to a specific subgroup within the population. Although no concrete strategies against tourism exist, these examples are considered non-transformative resilience.

Furthermore, the results indicate that action groups exist on the island. Although protests only seem to occur when the negative effects of tourism become visible, the negative effects of tourism develop slowly. For example, developments in Zakito and Punda, where large hotels were being constructed, led to the blocking views and threats to natural and cultural areas. As interviewee 6 (July 21, 2025) described:

Significant efforts are underway, and in many ways, the situation is already much improved compared to the past. Currently, there is little resistance to tourism, though some concerns arise occasionally. Developments like these have prompted local opposition, as residents are unhappy with the changes.

Similarly, local residents and environmental organizations organized a protest march against development in the Zakito area. Despite the protest march, development continued. Moreover, it was found that there is little social leverage against tourism growth and development, although some older residents might show resistance, younger residents do not join, suggesting there is little playing field for criticism against tourism (Interviewee 3, personal communication, July 7 2025), further demonstrating non-transformative resilience.

These examples illustrate the discussions surrounding tourism growth and development, and a slight change in public opinion. As well as indicating that the government has not taken appropriate actions to mitigate the negative impact of tourism growth and development, since these discussions otherwise would not take place. However, these discussions do signify a need for changes in tourism growth and development, although discussions alone are not enough for systematic change. These examples demonstrate that while resilience is shown, it is reactive and has a limited impact. Therefore, residents display non-transformative resilience, with discussions and occasional protests regarding tourism growth and development. Though these actions do not seem to influence decision-making regarding tourism development. This suggests that non-transformative resilience is the most occurring type of resilience, as perhaps people start drawing a line when the effects of tourism become visible or when they themselves are affected by it, as discussions are the easiest form of expressing disagreement.

#### *“Bounce backward resilience”*

The results, drawing on interviews and news articles, show that migration is an indicator of ‘bounce backward’ resilience, as former residents do not see a future for themselves or their families on the island. Other reasons for migration would include pursuing higher education. Additionally, migration increased during Covid-19, as one article described: “We expect a significant migration of people from Curaçao to the Netherlands. Due to poverty, many are likely to move to wealthier regions. in this case, the Netherlands” (NOS, 2025, para. 2). This indicates that residents might have grown tired of the economic vulnerability, unemployment, and limited employment opportunities. Increased migration results in demographic changes on the island, including brain drain. As these individuals do not return to the island, this can influence the intellectual debate regarding tourism. Another indicator of ‘bounce backward’ resilience is residents being described as passive and the existence of a fear culture on the island. As interviewee 1 (July 4, 2025) described: “Citizen participation is steadily increasing, with more people attending public consultation meetings. However, the population is generally not very outspoken. On both a macro and micro level, there is a culture of fear, which makes people largely hesitant to voice opposition”.

These examples illustrate why residents might migrate instead of confronting structural challenges, resulting in ‘bounce backward’ resilience. Therefore, ‘bounce backward’ resilience is mostly expressed through migration and fear-based culture. Both examples result in a less desirable

stable state, as migration, combined with brain drain, worsen economic vulnerability. In addition to fear based culture limiting collective action.

#### *“Bounce forward resilience”*

The results, supported by interviews and news articles, show that residents expressed concerns regarding tourism development and growth, yet those concerns did not result in ‘bounce forward’ resilience. For example, one article mentioned that some residents demand policies and regulations regarding the commercialization of beaches. However, no such policies have been implemented (Hendriksen, 2025, para. 11). Similarly, in April 2024, 1500 signatures were submitted calling for greater transparency and public participation in the development process. While these examples illustrate engagement from residents, the government has not acted on it. Thus, the potential of reaching ‘bounce forward’ resilience has been insufficient.

Furthermore, interviewee 5 spoke about two major developments on the island against tourism development. Both these cases were taken to court, and the verdicts ruled in favor of the residents instead of developers. Although the buildings were already developed and built, there was now paper proof (Interviewee 5, personal communication, July 14 2025). Though these examples indicate some bounce forward resilience, the power of developers is likely stronger. Thus, this highlights some capacity for ‘bounce forward’ resilience, but it is constrained through government action and favoring developers.

#### *Theme 4: “Perceptions influencing resilience”*

##### *“Perception of tourism”*

The results, drawing from the interviews, reveal that there is increased awareness among residents that Curaçao is becoming increasingly tourism dependent. However, there is little awareness of the importance of the tourism sector, namely the direct and indirect benefits of tourism. For example, benefits through employment, as many residents perceive tourism employment to only consist of servicing and cleaning, thus overlooking the opportunities it provides. This lack of awareness helps explain the non-transformative resilience that is displayed, as individuals working in the tourism sector are more likely to view tourism positively compared to individuals who don’t. As interviewee 7 (July 29, 2025) explained:

Many of us in Curaçao see tourism as just a waiter, a bartender, or a cleaner ... because we don’t know any better. It’s never been explained to us”. This exemplifies the limited awareness of the positive influence of tourism. This unawareness can influence resilience, as people are not going to protest what they do not know. Therefore, this might explain the little ‘bounce forward’ resilience being displayed.

Furthermore, the findings indicate a feeling of disconnect that residents experience with the financial benefits of tourism versus the negative social, cultural, and physical impacts. For instance, interviewee 5 (July 14, 2025) mentioned:

I think everyone is very happy so far, but they're not happy with the negative indicators, like I just mentioned: shortages of eggs, shortages of Coca-Cola, and housing prices that are skyrocketing. But they don't make the connection with tourism. If that realization sets in, then. You get the feeling people might start thinking, 'hmm, maybe not.' I have a very good friend, and of course, there are lots of tourists walking around. He'll say, 'Can't everyone just go away for a moment?!' But he's the same person who earns a lot from tourism, because he sings at the hotels. So he doesn't make that connection, that if those people weren't there, he wouldn't be earning that money.

This example illustrates how residents perceive tourism as a source of wealth and disruption, while not connecting the two. This disconnect is illustrated as well, since many residents are unaware that tourism-generated profit flows away from the island to foreign investors. This indicates that residents enjoy little financial benefits. Though, 'bounce forward' resilience would be expected, as there is high poverty and it could invoke feelings of unfairness, it is barely displayed. This could be explained by the perceived disconnect.

Furthermore, despite residents expressing willingness to partake in the tourism sector, they feel as if it's not for them, as foreign investors dominate the tourism sector. This can influence the displayed resilience. As interviewee 2 mentioned the feelings that tourism might invoke in individuals, as they might feel overwhelmed by the large number of visitors. While at the same time wanting to be hospitable toward them (Interviewee 2, personal communication, July 3 2025). These examples illustrate that the perception of tourism influences the displayed resilience. Low awareness, contradictory feelings and a feeling of exclusion help explain why 'bounce backward' resilience and non-transformative resilience dominate.

#### *"Perceived impact of tourism development"*

The findings, taken from interviews and news articles, demonstrate that, initially, residents might display positive feelings toward economic growth through tourism growth, although this has shifted slightly. As interviewee 1 (July 4, 2025) mentioned: "At first, you also see people being very euphoric about the economic growth and the growth of tourism". This could explain why residents were less likely to display 'bounce forward' resilience in the earlier tourism development stages.

However, over time this perception has shifted, as residents display concerns about the increased pressure on natural resources, infrastructure, and degradation of vulnerable ecosystems. Furthermore, there are concerns about the increasing costs of living and the growing demand for real estate. This illustrates a more negative perception of tourism development. There is also a fear that Curaçao might become unrecognizable to its own people due to tourism development. As well as these developments, resulting in the gentrification of neighborhoods. Thus, tourism is positively regarded for economic growth, in addition to negative perceptions regarding the social and environmental dimensions. These examples reflect the ambivalent perception toward tourism development; While tourism is regarded as necessary for the creation of employment, the benefits are reserved for a few individuals. Similarly, some residents described that they cannot enjoy their

island, due to increased tourism in popular areas, while enduring the negative impact of tourism. Therefore, these perceptions help explain the dominance of non-transformative and 'bounce backward' resilience, as the perception of tourism development is divided.

### *"Trust in government"*

The results, supported by government reports and news articles, reveal that trust in the government of Curaçao is generally low, as described by a government report from 2017: "To gain insight into this, CBS conducted a survey in 2015 among more than 2,500 respondents. Notably, the level of trust among the Curaçaoan population in both other people and institutions is low. The church is the institution in which people place the most trust, while the government is trusted the least." (Overheid van Curaçao, 2017, p.10). Although these findings are from 2015, they remain relevant, as no evidence has been found to suggest trust has increased. Furthermore, residents frequently mention corruption influencing the values in society, with socio-economic background influencing this perception.

The low trust in government helps explain the dominance of non-transformative and 'bounce backward' resilience. As residents have low expectations for government intervention, this results in increased non-transformative or 'bounce backward' resilience. For example, during the COVID-19 crisis, riots ensued on the island following layoffs, while protestors blamed the government for the economic crisis. This illustrates that these reactive protests do not lead to structural change, suggesting non-transformative resilience. Thus, low trust in government results in dominance of non-transformative and 'bounce backward' resilience.

### *Conclusion*

The data were fit in the adapted PESTE-type framework (Figure 8), which highlights how tourism dependence shapes the displayed resilience within Curaçao's current stable state. The initial conditions, described in theme 1, demonstrate high economic vulnerability at community, household, and individual levels, which decreases the capacity for structural change. Theme 2 described how tourism and tourism dependence further increase economic vulnerability; As most employment within tourism is low income, tourism dependence is associated with increased cost of living, and tourism-related profits flow away from the island. While government responses for regulation and investments remain insufficient. Additionally, it can be determined that the current location of the stable state is stable state A, which will be further explained in sub-question 4. This results in dominating non-transformative resilience, as discussed in theme 3. As residents engage in discussions and reactive protests. In addition to tourism dependence influencing 'bounce backward' resilience, as individuals seek stability outside of the island. However, 'bounce forward' resilience is little displayed. Despite protests and discussion, structural change did not occur. Theme 4 discussed the perceptions of tourism, explaining why these forms of resilience were displayed. The key factor is residents relying on tourism for their income, thus willing to undergo the negative consequences of tourism. Namely, due to unawareness of tourism profits flowing

away from the island, and the lack of trust in the government. Thus, this divided perception results in increased tourism dependence, which in turn leads to a less desirable stable state. To conclude, tourism dependence does not exclusively result in ‘bounce backward’ or non-transformative resilience. Although it does reduce the potential of ‘bounce forward’ resilience. Therefore, the hypothesis is only partly confirmed, as the displayed resilience within the current stable state of Curaçao is a combination of non-transformative and ‘bounce backward’ resilience.

<p style="text-align: center;"><b>Context: Current Stable State</b></p> <p>Economic vulnerabilities at community, household, and individual levels          One-pillar economy          Low incomes &amp; high cost of living          Employment instability &amp; underfunded local facilities          Rising income inequality          Limited access to education &amp; opportunities</p>	<p style="text-align: center;"><b>Disturbance: Tourism Dependence's influence on the current stable state</b></p> <p>Tourism accounts contributes to government income          Government heavily reliant on tourism          Benefits concentrated with foreign investors          Rapid tourism growth creates dependency          Tourism exacerbates economic vulnerability</p>
<p style="text-align: center;"><b>Capacity: Ability to Deal with disturbances</b></p> <p>Low government support and structural inequalities limit capacity.          Insufficient aid &amp; social programs          Limited regulation &amp; oversight          Underfunded community services          Limited ability to cope with shocks          Residents constrained in achieving bounce forward resilience</p>	<p style="text-align: center;"><b>Reaction: Resilience</b></p> <p>Non-transformative: discussions &amp; occasional protests, limited impact          Bounce-backward: migration, passivity, fear culture          Bounce-forward: petitions &amp; court cases, rare successes          Overall resilience constrained by structural and socio-economic factors</p>

Figure 8. Overview of the adapted PESTE-type framework.

Socio-economic tipping points

This section presents the results from the thematic analysis, exploring the extent of tourism dependence influencing reaching tipping points. A total of four themes were found during thematic analysis. Each theme will be further explained in the following section. Together, these themes help to demonstrate the extent of tourism dependence’s influence in reaching tipping points.

1. Perturbations

This theme identifies shocks and stressors caused by tourism or tourism dependence, which can push the stable state to a tipping point. This theme is composed of four sub-themes: 1. “Economic vulnerability”, which explores how economic vulnerability related to tourism growth and development influences the current stable state. 2. “Access to public facilities” explains how tourism impacts public facilities and resources. 3. “Impact on infrastructure” explores how tourism impacts the physical infrastructure of Curaçao. 4. “Tourism-led inflation” demonstrates tourism’s impact on the local economy and inflation. Together, these sub-themes address the most common perturbations seen on the island. In addition to analyzing how these perturbations influence the potential of reaching a tipping point.

## 2. Capacity to deal with disturbances

This theme demonstrates whether residents, communities, and the government of Curaçao have the capacity to mitigate and manage the perturbations caused by tourism dependence. It consists of four sub-themes: 1. “Government awareness” explores the government awareness regarding the perturbations and the current stable state. 2. “Governmental capacity” explores the capacity of the government to manage and mitigate tourism related perturbations. 3. “Community capacity” explores the capacity of the community to manage and mitigate tourism related perturbations. 4. “Economic diversification” illustrates economic diversification and how that is used to manage tourism related perturbations. Together these sub themes are used to analyze the potential of reaching a tipping point.

## 3. Trajectory

This theme explains the trajectory that was followed to reach a certain outcome, or in this case stable state. Namely, how the current stable state was reached. This theme identifies past tipping points, for example, historical developments and current patterns. The results demonstrate a pre-tourism economy and a peri-tourism economy, as Curaçao’s economy was diversified in the past, which included oil refining and financial offshore. Though tourism existed, it was never regarded as economically significant.

## 4. Resilience

Lastly, this theme has been previously described in the results section of the second sub-question. However, for this sub-question these results will be compared to the perturbations and used to analyze the type of tipping point that is likely to be reached. Therefore, the data remains the same, while the angle of interpreting this data will change, meaning the results will not be repeated here; they will only be used for analysis of the potential of reaching a tipping point. Together these themes demonstrate the extent of tourism dependence’s influence in reaching tipping points.

### Theme 1: “Perturbations”

#### *“Economic vulnerability”*

The results, drawing from triangulation through interviews, news articles, and government reports, show that tourism increases government expenditure on public services, such as infrastructure, policing, and waste collection. Yet, most of the tourism-related revenue flows back to investors (Interviewee 3, personal communication, July 7 2025). This demonstrates the hidden costs of tourism, which limits the sector’s ability to help mitigate economic vulnerability. Furthermore, government tax holiday exacerbates economic vulnerability. Tax holiday is a tax rule in which hotels and resorts do not pay tax for a certain number of years; This was implemented as a strategy to attract hotels, resorts, and investors to the island, yet reducing government revenue. One column argued:

This amount could have been significantly higher if the tax holiday for companies had been abolished. From an economic standpoint, it is incomprehensible why the government continues

to grant tax holidays, even though there is a major investment boom in tourism projects. It essentially gives money away to large investors, while small and medium-sized businesses have to pay the full amount. (Van den Bergh, 2024, para. 3).

Exemplifying that the government income from tourism is still not sufficient, while this money could have been used to invest in decreasing economic vulnerability, thus strengthening local resilience. Additionally, there is little thought about what will happen if the years for the tax holiday have passed. For example, within the tourism sector, there are several major players on the island, and they are incentivized to stay due to the tax holiday. As those companies profiting from the tax holiday could threaten to leave if the tax holiday is not extended (Interviewee 4, personal communication, July 15 2025).

Moreover, within the tourism sector, there are few opportunities for career growth, indicating that minimum wage workers have little opportunity for increasing their income. This indicates that tourism growth does not translate to increased economic benefits. This is further demonstrated as the socio-economic middle class on the island is virtually nonexistent. As one article described: "Curaçao now has higher inequality than most other countries in the region. This indicates that low-income groups have benefited little from the growing tourism sector and the resulting economic growth." (Mak, 2025, para. 1). This example shows that, despite high tourism revenues, the economic benefits to residents are limited. Thus, it indicates a disconnect between the income of people and economic benefits from tourism.

Similarly, despite economic growth, poverty increased, which can be explained by profit streams flowing away from the island, minimum wage employment, and little opportunity for growth. This indicates that tourism negatively influences economic vulnerability, as well as increasing the cost of living. This is further exemplified as interviewee 9 (July 22, 2025) described: "And so Curaçao is really a tourist island, you know. People with money go there. They can spend it, and they might not even go to the supermarket at their resort or vacation home or whatever. Yeah, which makes things really difficult for the local population." This quote reflects that tourism increased economic vulnerability, namely, for low income households. However, tourism was found to be responsible for an increase in direct, as well as indirect employment, which can positively influence economic vulnerability. Consequently, more individuals would be employed and receive income. Although tourism dependence would increase, more employment would be associated with tourism. This can lead to increased unemployment during economic downturns. This indicates the extent of tourism on employment, as different types of employment start relying on tourism. For example, dry cleaning companies relying on smaller hotels to use their services, and provide their income (Interviewee 8, personal communication, August 6 2025). Nonetheless, tourism has not yet helped improve socio-economic stability, although this might happen with time, once tourism growth has been sufficient. Thus, tourism could lead to decreased economic vulnerability. Therefore, tourism mostly negatively contributes to economic vulnerability, namely through tourism-associated government income, which could be much higher. Additionally, it does not positively contribute to economic vulnerability, as salaries remain low within the tourism sector, and career growth

opportunities are limited. Thus, the potential of reaching a ‘bounce backward’ tipping point is higher.

#### *“Access to public facilities”*

The results, drawing from interviews, demonstrate that certain areas on the island have become overcrowded, resulting in difficulties to access those areas. For instance, during cruise visitations, the capital city Willemstad is overcrowded with an estimated 6000 to 7000 visitors (Interviewee 6, personal communication, July 21 2025). These visitors generate additional waste and impact other types of infrastructure. Similarly, overcrowded beaches limit residents’ access as well. As residents described the feeling of being constrained. Furthermore, the beaches on Curaçao are subject to commercialization. Some beaches require an entry fee, or beach owners rent out lounge chairs, resulting in limited accessibility for low-income households. Despite that by law all beaches should remain accessible, which suggests limited regulation of such laws. Similarly, interviewee 7 (July 29, 2025) described:

The beaches are being sectioned off with lounge chairs because the beach owner or operator has made deals with certain cruise ships. So if you arrive there with your family, maybe 200 chairs are set up, only 10 are being used, but 160 are empty, and you’re not allowed to use them.

This quote further illustrates limited access to public facilities. Additionally, the results suggest that limited beach accessibility potentially results in loss of culture, as residents are unable to access beaches they are familiar with. This is further exemplified as one article described: “In addition, some residents fear the loss of cultural identity and rising living costs due to the growing demand for real estate and services.” (Drayer, 2025, para. 5). These examples illustrate the impact of mass tourism driven by tourism dependence. Overcrowding and commercialization result in limited accessibility of public facilities, such as beaches and other popular areas. Therefore, in its current form, these developments increase the likelihood of reaching a ‘bounce backward’ tipping point, because of little regulation and increased commercialization. Although a ‘bounce forward’ tipping point could be reached as well, as dissatisfaction could increase among residents regarding the limited accessibility.

#### *“Impact on infrastructure”*

The results, supported by interviews and news articles, indicate an increased pressure placed on infrastructure, resulting from a growing number of visitors. Consequently, hotel development intensified, and the airport cannot keep up with this demand and requires improvement. Infrastructure, such as roads, is under pressure as well, because increased visitor numbers results in increased congestion in traffic. Residents describe difficulty in finding parking spots near beaches and other popular visiting sites as well. Additionally, affordable housing worsened, due to a growing demand for real estate. This reveals the growing pressure on physical infrastructure resulting from tourism, further exemplified by interviewee 3 (July 7, 2025), as they describe:

Then Aqualectra, the utilities company, says: ‘Sorry, we hadn’t anticipated such a strong increase in the number of electricity users, especially with the growth of tourism. The demand is

greater than the supply. So now we're in a very tight situation ... and on top of that, when the wind stops, the wind turbines fail.' So they start switching neighborhoods on and off. For example, right now it's my neighborhood ... you sit two hours without electricity, then the power comes back, and the next neighborhood is switched off. This is simply to reduce demand, because the supply of electricity can't keep up. That's something the population feels directly, because the power goes out. And why? Because all those hotels consume huge amounts of electricity. All those tourists are lying in air conditioning. Poorer people here don't use air conditioning ... but in the hotels, the tourists do.

This quote exemplifies the impact residents experience in their daily lives as a result of pressure on the infrastructure. Further suggesting the little effort in improving these challenges, as sewage, traffic, and electricity were considered during tourism development. Thus, the negative impact of tourism on the local infrastructure is likely to lead to a 'bounce backward' tipping point, as it displays a vicious cycle. The more the government focusses on tourism as an economic pillar, the greater the impact on the infrastructure will be, which comes with hidden associated costs and challenges.

#### *"Tourism-led inflation"*

The results, drawing from interviews and news articles, reveal that affordable housing is limited, resulting from real estate developments and foreign investors purchasing houses. For instance, house prices are near half a million guilders, while for a functioning housing market, those prices should be lowered. As a consequence, middle and low-income households are left out of the housing market. Furthermore, suggesting an unregulated housing market and real estate development. This is further exemplified as Curaçao focuses on mass tourism, which means that the appropriate infrastructure should be built. Thus, tourism growth has increased, namely driving up the value of beachfront properties.

The prices of goods and services also increased, for example, a cup of black coffee used to cost 3 guilders, now the price has almost doubled, suggesting tourism-led inflation (Interviewee 2, personal communication, July 3 2025). Although other factors could have led to this type of inflation, such as increased taxes and increased production prices. However, the prices of goods and services used to be lower, stores and companies have started adapting toward tourists' expenditures, resulting in those increased prices. This is further demonstrated as interviewee 5 (July 14, 2025) described:

Yes, you see progress in some areas, but decline in others that can't really be measured. So yes, unemployment is lower — *jee* [sarcastically] — but everything has become more expensive. Tourists, for example, are used to paying €10 for a drink in the Netherlands. For us, that's 22 guilders, but we're used to paying 10 [guilders]. So going out has become very expensive for us, and... you don't always have to go out, but you'd like to be able to go out at home once in a while.

These examples of tourism-led inflation have two key causes: increased foreign investments and price matching to tourists' expenditures. This causes challenges for low-income and middle-income families. As well as reducing their social activity, as that has become unaffordable. Therefore, tourism-led inflation is likely to reach a 'bounce backward' tipping point, as socio-economic stability is not improved through these developments.

## Theme 2: "Capacity to deal with disturbances"

### *"Government awareness"*

The results show that government awareness regarding economic vulnerability exists, as several government reports have described this. They acknowledged that despite economic growth, the benefits of that did not translate to benefits for all layers of society. Additionally, they acknowledged that their economy is small, as it further shrank during COVID-19, which, according to them, was due to insufficient leadership. This illustrates awareness of their own faults. As during the COVID-19 pandemic, the economic vulnerabilities on the island were further exposed. However, no mentions were found on how to strategically mitigate this. This is exemplified by a government report from 2022: "Vulnerable groups have been hit hardest in terms of job security and income. The loss of loved ones, uncertainty about the future, social isolation, and the disruption of normal life caused deep pain." (Overheid van Curaçao, 2022, p.10).

This quote shows that they acknowledge the impact of the COVID-19 crisis on their economy and its impact on vulnerable groups. Yet, the response consisted of achieving economic growth through tourism growth. Furthermore, the trajectory of tourism development is unknown, as policies and regulations regarding tourism development are limited. In addition to little knowledge of the impact of tourism on the island, this suggests limited government awareness. Together these examples suggest that, while the government is aware of the economic vulnerability, little awareness exists on the impact of tourism and the formalization of tourism development. Further illustrating the limited capacity to manage tourism-related perturbations. Therefore, a 'bounce backward' tipping point is more likely to be reached.

### *"Governmental capacity"*

The results, drawing from news articles, reveal that most tourism policies are still in their infancy, as indicated by the limited regulation and policies, suggesting little capacity to manage tourism development and growth. Although that could be attributed to tourism development being a more recent phenomenon, which will be further explained in Theme 4. As one news article described: "The implementation of previously drafted tourism master plans has been inadequate. Enforcement of laws and regulations is weak and often arbitrary, and a clear policy vision for tourism is lacking." (Van den Bergh, 2024, para. 7). This further suggests limited governmental capacity to manage tourism-related perturbations.

Furthermore, limited financial capacity was seen as well, as tourism generated revenue flows away from the island toward foreign investors, while the increased costs of tourism are for the government. This was demonstrated during the COVID-19 crisis, as the government of Curaçao depended on the Dutch government for financial aid. Despite the limited financial capacity, during COVID-19 airline companies received financial compensation for empty seats from the Curaçao Tourism Bureau (CTB). Financial capacity is further limited as property owners do not pay the property related taxes, suggesting limitations in government revenue through tax collection. Although, the government aims to compensate for these losses through the implementation of an entry fee for visitors. These examples illustrate the limited financial capacity of the government and the weak enforcement of tourism-related policies and regulation. Thus, suggesting limited government capacity to manage tourism-related perturbations, which increases the likelihood of reaching a 'bounce backward' tipping point.

#### *"Community capacity"*

The results, supported by interviews and news articles, show that, despite increased costs of living and low incomes, a large informal sector potentially exists. This suggests some community capacity to manage economic vulnerability. However, communities lack the appropriate tools to contribute to this, as community centers and other facilities deal with underfunding. This is illustrated as one news article described: "Well-functioning community centers could also contribute to poverty reduction in the neighborhoods. However, there is significant inequality among the community centers." (Koopman, 2025, para. 11). Further indicating the limited capacity of communities. Although willingness to assist others has been demonstrated by residents. Therefore, on a community level, there is limited capacity to manage economic vulnerability, resulting from government strategies. Although it is twofold, as on a household and individual level, the capacity might be higher, due to the large estimated informal sector. Thus, the community capacity is likely to reach a 'bounce backward' tipping point.

#### *"Economic diversification"*

The results, drawing from triangulation through government reports, interviews, and news articles, show that tourism-dependent economies saw increased economic growth compared to non tourism-dependent economies, which is likely due to the popularity of the tourism product. Though, tourism-related perturbations are likely not considered, as well as the risks associated with mono-economies, since those reduce the capacity to manage perturbations. Moreover, the economy of Curaçao was more diverse in the past: however, tourism gained prominence as other sectors diminished. Thus, suggesting limited capacity to manage perturbations. As exemplified by interviewee 1 (July 4, 2025): "They may also play a role in the future, but we don't know yet. And that is what makes it risky to rely solely on tourism. At the same time, it is not easy to develop a new pillar for the economy." This illustrates difficulties for the development of a multiple pillar economy, although it is necessary due to the risks associated with mono-economies. Therefore, there is limited economic diversification on the island, which signals that during economic

downturns, there is decreased income. Meaning little capacity to manage perturbations, thus limited potential for reaching a 'bounce forward' tipping point.

### Theme 3: "Trajectory"

Drawing from the primary and secondary qualitative data, a past tipping point was identified in the 80's of the 20th century, as Shell left the island, resulting in mass lay-offs. During this period, migration to the Netherlands occurred, which resulted in a decrease of knowledge and skillset on the island. Furthermore, during this period, buyer tourism from Venezuela disappeared after the Venezuelan crisis. Consequently, the potential for developing tourism on the island decreased. Additionally, the financial offshore collapsed, as interviewee 3 (July 7, 2025) described:

The offshore sector collapsed. Why? Well, the countries where those companies were based ... their headquarters were established in Curaçao, which brought in millions. But eventually, those countries woke up and started implementing tax treaties, which prohibited that for those companies.

These examples suggest a past tipping point, where economically significant sectors collapsed. Another past tipping point was identified in 2019, as the oil refinery closed, resulting in mass lay-offs. At this point, all economically significant pillars collapsed, except tourism. Similarly, Curaçao's GDP shrank by 10%. This illustrates a combination of external and internal factors leading toward a 'bounce backward' tipping point. Before economic shrinkage, the tourism sector received little attention in the policy cycle. However, as other economic pillars collapsed, attention shifted to tourism. However, the actual focus on tourism happened during the COVID-19 crisis, as in 2010, the number of visitors was still low, below 200.000 per year. This changed in a 10-year time span as the number of visitors grew to over 500.000 in a year. This increase in tourism was due to Curaçao being one of the few destinations that were regarded as safe to visit during the COVID-19 pandemic by the Dutch government. Consequently, more visitors came to the island during this time, such as digital nomads. Thus, leading to increased publicity for the island, which was necessary as economic growth had stagnated. Though, as interviewee 1 (July 4, 2025) noted: "It can be argued that we have become a tourism success largely due to circumstances, rather than as a result of deliberate policy." This quote illustrates that Curaçao became a tourism success story, rather through occurrence than through strategic policies, which could explain the unregulated tourism development. In addition, this demonstrates that rather than policies, circumstantial factors led to the tourism-dependent stable state. Therefore, the system was pushed into this stable state by several external and coincidental factors.

Similarly, interviewee 5 (July 14, 2025) described:

We lost 20% of the economy in just one year ... yes, all attention then shifted to tourism. Everyone contributed in some way, even those who once thought tourism would bring nothing to the island. Now there's a kind of synchronicity, with people all working together because tourism

is important ... but at the same time, other sectors are collapsing. So it's a 'perfect storm' in favor of tourism.

This exemplifies that economic shrinkage made it difficult for the tourism sector to receive attention in the policy cycle. However, as the economic pillars collapsed, tourism was seen as a means to increase economic growth. This further demonstrates a tipping point, as tourism growth was used for economic recovery. Additionally, corruption was commonly mentioned, specifically regarding the issuing of development permits. This suggests limited interest in smaller tourism development. Therefore, various past tipping points have been identified, which result from both external and internal factors. Since the collapse of economically significant pillars and several crises that occurred. These combined factors all point toward a 'bounce backward' tipping point in favor of tourism development and increasing tourism dependence, which are shown in Figure 9.

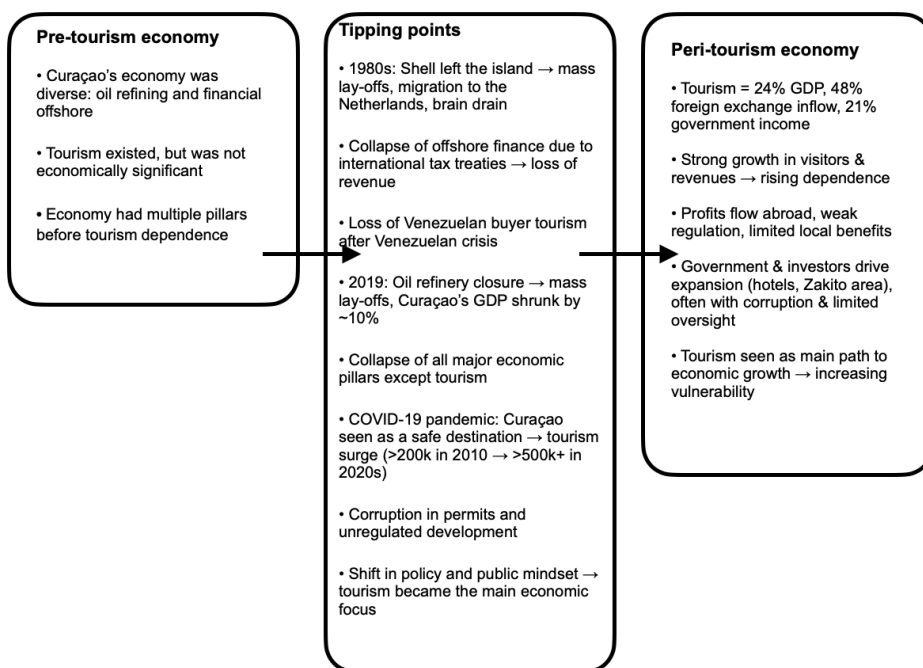


Figure 9. Schematic overview of previous tipping points and the previous and current stable state.

Theme 4: "Resilience"

**Table 7**

*Overview of the tipping points*

Type of tipping point	Perturbations	Resilience
Bounce backward tipping point; There was no resilience against this perturbations. Thus, the perturbation is larger.	Tourism increases government expenditure (infrastructure, policing, waste collection), but most revenue flows back to investors.	None of the displayed resilience was against this perturbations

Bounce backward tipping point; There was no resilience against this perturbations. Thus, the perturbation is larger.	Tax holidays for hotels reduce government income and economic benefits for locals.	None of the displayed resilience was against this perturbations
Bounce backward tipping point; The perturbations are larger than resilience (migration).	Low wages and limited career growth in tourism	Discussions and public debates about tourism impacts (TV, radio, community talks). Migration due to limited opportunities, economic vulnerability, or pursuit of education.
Bounce backward tipping point; There was no resilience against this perturbations. Thus, the perturbation is larger.	Goods and services cost more as local businesses adapt to tourist spending.	None of the displayed resilience was against this perturbations
Bounce backward tipping point; There was no resilience against this perturbations. Thus, the perturbation is larger.	Restricted access affects cultural practices and social activities, particularly for low-income households.	None of the displayed resilience was against this perturbations
Bounce backward tipping point; There was no resilience against this perturbations. Thus, the perturbation is larger.	Growing tourism strains infrastructure: roads, airport, electricity, sewage, parking.	None of the displayed resilience was against this perturbations
Bounce backward tipping point; There was no resilience against this perturbations. Thus, the perturbation is larger.	Utilities face high demand; services are intermittently disrupted.	None of the displayed resilience was against this perturbations
Bounce backward tipping point; The perturbations are larger than resilience (discussions).	Housing prices increase due to foreign investment and coastal real estate development, excluding middle and low-income households.	Discussions and public debates about tourism impacts (TV, radio, community talks).
No tipping point; The resilience (discussions and public debates) were a response to the perturbations. Though, this does not indicate a tipping point.	Low wages and limited career growth in tourism	Discussions and public debates about tourism impacts (TV, radio, community talks). Migration due to limited opportunities, economic vulnerability, or pursuit of education.
No tipping point; The resilience were a response to the perturbations. Though, this does not indicate a tipping point.	Overcrowding during cruise visits and commercialization limit access to beaches and public areas.	Discussions and public debates about tourism impacts (TV, radio, community talks). / Advocacy for policies/regulations (e.g., commercialization of beaches, transparency in development).

Table 7 shows an overview of the type of tipping points reached through the perturbations and displayed resilience. No 'bounce forward' tipping point has been identified. Two instances of no tipping point were identified, and nine examples of reaching a 'bounce backward' tipping point were identified. The potential of reaching a 'bounce backward' tipping point was determined, as the perturbations were larger or more impactful than the displayed resilience. These perturbations could result in transformation toward an alternative stable state if continued. Most of the displayed resilience, which could potentially lead to a changed outcome, whether 'bounce backward' or 'bounce forward', was geared toward discussions surrounding income and reactive protest against the development of physical structures, such as hotels. Therefore, the perturbations described here did not always receive separate displays of resilience, automatically resulting in a 'bounce backward' tipping point. Although some displays might consider multiple perturbations at the same time. Furthermore, most displays of resilience might not have worked due to the government's failure to change.

### *Conclusion*

The first theme discussed the tourism-related perturbations, including limited access to public facilities, the increased pressure placed on infrastructure, and tourism-led inflation. These perturbations showed that tourism dependence generates negative feedback, which is consistent with reaching a 'bounce backward' tipping point. The second theme discussed the capacity to deal with disturbances and demonstrated that both government and community capacity are limited. As the government has limited financial capacity, and regulations are non-existent. Additionally, the residents directly experience the perturbations, but lack effective response mechanisms. Together, this indicates that the current stable state lacks buffers to prevent it from reaching a 'bounce backward' tipping point. The third theme discussed the previous tipping points and how these were reached: Through a mix of internal and external factors. This shows that tourism came as a resource for economic growth, thus reinforcing tourism dependence. The last theme discussed the displayed types of resilience, and how they lead to reaching a tipping point. As discussions and protests exist but did not lead to systemic change. In addition to migration, and brain drain, and fear-culture further reinforcing tourism dependence. Although petitions and court rulings exist, they're too weak to contribute to systemic change. Therefore, the results support hypothesis 3: tourism dependence in Curaçao increases the likelihood of reaching a 'bounce backward' tipping point, since few counterexamples exist. Perturbations, such as overcrowding, pressure on infrastructure, tourism led inflation, and social exclusion together with weak governance, limited community capacity, and reduced diversification undermine resilience. While some examples of 'bounce forward' resilience exist, they're too small to outweigh the perturbations. Thus, tourism dependence increase the potential of reaching a 'bounce backward' tipping point.

### Opportunities for transformation

This section presents the results of the thematic analysis, analyzing how tourism dependence can be used as an opportunity for transformation to an alternative stable state. A total of four themes were found during thematic analysis.

#### 1. Transformation

This theme illustrates the tools, policies, and pathways that can be used to transform to an alternative stable state, namely, stable state D. Although other stable states are analyzed as well. This theme comprises four sub-themes: 1. “Barriers to transformation” explores the barriers to transformation to an alternative stable state. 2. “Government aiding transformation” explores strategies and approaches the government could or have implemented, and how these approaches aid in transforming to an alternative stable state. 3. “Institutional support and policy response” analyzes the institutional support and policy responses for transformation from government institutions, such as the Curaçao Tourism Board (CTB) and the Ministry of Economic Development (MEO). 4. “Tourism aiding transformation” explores how the tourism sector can aid in transformation toward an alternative stable state. This includes both planned and implemented actions aimed at enabling transformation, diversification, or systemic change.

#### 2. Capacity of transformation

This theme demonstrates the capacity of the government and community for transformation toward an alternative stable state, thus indicating whether transformation is feasible. It is composed of two sub-themes: 1. “Capacity of government” explores the capacity of the government for transformation toward an alternative stable state. 2. “Capacity of tourism” explores the capacity of the tourism sector for transformation toward an alternative stable state. Thus, the resources and abilities of the tourism sector enable or inhibit transformation.

#### 3. Competing stable states

This theme explores strategies and aims that the government and residents associate with transformation in accordance with the outcome of the alternative stable state. It analyzes how residents, communities, tourism actors, and government envision the future of Curaçao, and which alternative stable state is most likely to be reached given current actions and policies. It is composed of three sub-themes: 1. “Stable state A” explores the strategies that are most likely to help transform into an alternative stable state with high tourism dependence and low socioeconomic stability. 2. “Stable state B” explores the strategies that are most likely to help transform into an alternative stable state with high tourism dependence and high socioeconomic stability. 3. “Stable state C” explores the strategies that are most likely to help transform into an alternative stable state with low tourism dependence and low socioeconomic stability.

#### 4. The ideal stable state

Lastly, this theme represents the target stable state that should be achieved. This theme explores descriptions of the “ideal stable state”, which includes: decreased tourism dependence and increased socio-economic stability of Curaçao. Additionally, it analyzes how that could be achieved using the results from the vision and planning theme. Together, these themes explain how tourism dependence can be used to transform into an alternative stable state.

##### Theme 1: “Transformation”

###### *“Barriers to transformation”*

Three barriers were identified: i) Institutional barriers, ii) Economic barriers, and iii) Social barriers, supported by news articles, interviews, and government reports.

The results reveal a tense political climate in Curaçao, which creates limited space for substantive debates and discussions. Furthermore, the government has shown a degree of unwillingness to change. For instance, a recent carrying capacity study that was conducted to calculate the carrying capacity of the island for the total number of visitors without exceeding the carrying capacity. However, there were concerns that this study would not be used for policy making, as that is likely driven by alternative incentives. Since the government’s aim is to attract investors and developers to further develop tourism. As interviewee 1 (July 4, 2025) described: “They entered this campaign with the message ‘give us the majority.’ From the tourism sector, they received a lot of donations to run an aggressive campaign, and thus now have an absolute majority to continue this policy.” This quote suggests that the government is driven by incentives from the tourism industry. Additionally, corruption was commonly mentioned. Namely, for the issuing of development permits for tourism development, although it is not confirmed, as it is difficult to verify.

Moreover, political opposition is minimal, suggesting increased support in favor of tourism. As interviewee 1 (July 4, 2025) mentioned: “The policy that I am describing has gained a lot of supporters, because for the first time in a very long time ... actually never seen before ... we have a party that can govern alone.” These examples illustrate institutional barriers to transformation toward a stable state with decreased tourism dependence. Although these barriers could be regarded as opportunities for transformation toward increased tourism dependence. Furthermore, the one-pillar economy has been identified as an additional barrier to transformation. This is demonstrated as revenue remains high in tourism, there could be little incentive for transformation toward a multiple pillar economy. This results in neglect of other potentially significant economic sectors. Additionally, this suggests tunnel vision, while the focus remains on tourism growth and development for economic growth.

Exemplified as interviewee 4 (July 15, 2025) mentioned:

Well, in the past they had a very large dock. What do you call it? Yes, they call it a dry dock, in Dutch a large dock, where ships could enter and be repaired. But all that knowledge has gone to Colombia, to the port of Colombia. They focus too much on tourism and then neglect other things. Yes, this is typical of Curaçao.

The current tourism model on Curaçao reduces the economic net benefits, since all-inclusive tourism has high import costs, yet all payments are accounted for outside of the island. Thus, this tourism model does not contribute to the multiplier effect. Therefore, focusing on these types of tourism models indicates a barrier to socio-economic transformation on the island. Additionally, tax-related revenue is low due to the tax holiday system. These examples illustrate economic barriers to transformation as financial streams flow away from the island and economic growth is based solely on tourism. The social barriers that have been identified include: Brain drain, which results in insufficient skill and knowledge outside of tourism. In addition to the expected transformation resulting from residents, which is challenging due to brain drain and lack of government support.

#### *“Government aiding transformation”*

The results, drawing from news articles, government reports, and interviews show limitations in policy implementation and regulation regarding tourism development. Consequently, tourism development is uncontrolled, which results in transformation toward an increased tourism-dependent stable state. This suggests weak governance, as tourism generated income has not been used for the improvement of social security and public facilities, such as developing amenities near public beaches. Furthermore, failure to diversify the economy was commonly mentioned, despite the COVID-19 pandemic demonstrating the risks associated with mono-economies. Since poverty and unemployment increased during this time. This is further demonstrated as the most recent government program, as of 2025, lacks financial substantiation and clear timelines. Although it does mention the goal of decreasing poverty and the protection of vulnerable groups on the island. Suggesting awareness of these challenges, yet lacking strategies for mitigation.

Several pro-tourism policies were identified; The goal of these policies is to ensure economic growth. For instance, the Ministry of Health, Environment, and Nature aims to strengthen the tourism product through the development of wellness as a tourist product. As well as the Ministry of Traffic, Transportation, and Spatial planning, aims to strengthen the tourism product through the restoration of monuments and utilization of the historic city center to attract tourists. Additionally, the execution of the tourism master plan is led by the ministry of economic development (MEO). This plan contains ideas for the development of more knowledge, expertise, and accessibility of data; create an investment project to enhance tourism in the city center; and the realization of transnational education (TNE).

The master plan, published in 2015, expected increased tourism growth, which indicates government awareness of tourism’s importance as an economic pillar. Similarly, the current government aims to achieve increased tourism growth, which suggests transformation to a pro-tourism stable state. As interviewee 1 (July 4, 2025) mentioned: “The policy of, let’s say, the government ... and the government is still very pro-development, pro-tourism.” Therefore, the government is aiding transformation, but toward a stable state of increased tourism dependence,

rather than diversification. Furthermore, the results found government aims to stimulate local production, strengthening small and medium-sized businesses, and reducing bureaucracy. However, there are concerns: local production needs land, which might not be available, and in tourism-dependent destinations, bureaucracy is overrepresented. Though these aims lack strategies for implementation. This suggests limited government intervention to assist transformation. Together, these examples illustrate the focus on pro-tourism policies and tourism growth as a means for economic growth, which inhibits transformation toward a desirable stable state of decreased tourism dependence, despite the government's potential for transformation.

*“Institutional support and policy response”*

The results, supported by news articles, government reports, show that the key institutional actors are the MEO and the CTB; The MEO is responsible for economic development, which is currently achieved through tourism growth, and the CTB is responsible for the promotion of tourism development and the implementation of tourism-related policies. Both institutions have acknowledged their role in shaping the economy of the island, but remain in favor of supporting tourism. Furthermore, the CTB has high involvement in the policy-making process, as its policies determine the island's global position in the tourism market. Suggesting that the sustained competitiveness depends on the policies that strengthen the island's position as a tourism destination. Thus, their policies should reflect that, further strengthening the current tourism model. Similarly, the MEO created tourism laws, which contributed to the regulation of sub-sectors, such as accommodations and tour guides, introduction of new revenue streams. Additionally, the MEO emphasized that economic recovery, diversification, and sustainable development are essential for sustainable economic growth. Yet, they commonly mention strategies for improving the economy, which are focused on improving tourism. Therefore, suggesting that the institutional support is pointing toward pro-tourism transformation.

A government report on post COVID-19 economic recovery revealed that the tourism sector was more frequently mentioned for achieving economic growth compared to other sectors, though this reflects tourism being the sole major economic sector (Overheid van Curaçao, 2022). It does suggest overrepresentation of the tourism sector and neglect of other economic sectors. Thus, these examples suggest that institutional support and regulation reduces the potential for transformation toward decreased tourism dependence. Furthermore, the CTB is governed by the MEO, which suggests a linkage in ensuring economic growth through increasing tourism growth. Therefore, it is in their interest to increase the number of visitors, which is achieved through enhancing the current tourism model. This is exemplified as a CTB report mentioned: “All tourism policies must strongly emphasize and outline ways of enhancing economic benefits and minimizing harm across the sector.” (Curaçao Tourist Board, 2024, p.11). Additionally, the CTB demonstrated awareness regarding economic leakages, which indicates support to keep tourism revenue on the island. Although institutional support exists, it is favored toward reinforcing tourism dependence.

Moreover, the CTB further claims their impact is not limited to tourism, but they shape communities and enhance economic development (Curaçao Tourism Board, 2022). As they aim to contribute to the Sustainable Development Goals (SDG's). However, this is not reflected in their policies. For instance, the contribution to SDG 4, aimed at ensuring inclusive and equitable education. The CTB launched a project aimed at teaching children the importance of tourism on the island and sparking their interest in pursuing a career in tourism. This can help children develop a better understanding of tourism and its importance to the economy and society. However, initiatives like these might raise concerns such as fitting the culture and society around tourism instead of the other way around. Additionally, they contributed to SDG 3, which aims to ensure global health and well-being. Although these contributions indicate contributions to transformation, these claims are often oversimplified. These examples suggest that both the MEO and CTB lean more toward pro-tourism transformation. Thus, not contributing to transformation toward a decreased tourism-dependent stable state, as these institutions frame policies in terms of sustainability and resilience, but in practice, they reinforce tourism dependence. While policies and strategies are mentioned regarding economic diversification and sustainable economic growth, most are pro-tourism. Therefore, transformation driven through institutional support is unlikely.

The results demonstrate a lack of strategies to slow down tourism development, as the strategic tourism development plan has yet to be implemented. The plan mentions supporting local tourism and entrepreneurs, and facilitating economic diversification. Although stakeholders advocate for policy and regulation regarding the commercialization of public facilities, such as ensuring a third of beaches should remain accessible to locals. These strategies are yet to be implemented. Additionally, attempts have been made regarding the introduction of a tax for foreign investors purchasing real estate on the island. These examples demonstrate potential policy responses to transform the tourism product and to mitigate tourism-related perturbations. However, none of these plans have been implemented into broader policies, suggesting limitations in the potential for decreasing tourism dependence. Furthermore, the results show that the tourism sector has become an important stakeholder within the policy-making process, suggesting that tourism and related organizations are going to shape policies. Thus influencing transformation toward an ideal stable state. Despite these examples, the government has proposed the implementation of an entry fee, which should replace the 7% tax on overnight stays. This entry fee will be used to invest in infrastructure and tourism. Although the entry fee has not yet been implemented and the amount is unknown. However, a similar strategy was adopted in Bonaire, a neighboring island to Curaçao, as they were opting for slow growth. However, in Bonaire, the visitor numbers indicated that this aim most likely has not been reached, as the visitors number kept growing. Therefore, such a measure might not work to reduce the number of visitors in Curaçao, but it could be used to increase government income.

#### *“Tourism aiding transformation”*

The results, supported by news articles, government reports, found a lack of development of alternative tourism models. Thus, suggesting the development of the SSS tourism model.

However, once tourism has further developed, it requires increased attention and manpower, resulting in limited investments in other sectors. This suggests that tourism can inhibit the potential for transformation. Furthermore, tourism is not a unique product of Curaçao, suggesting difficulties restructuring it. As other tourism destinations offer similar tourism products. Although limited evidence exists on the outcome of realizing alternative tourism models. Additionally, tourism development leads to a paradox, while authentic tourism attracts most visitors, the governments develops tourism too much and loses its authenticity, which will ultimately lead to a loss of tourism. It indicates that overdevelopment seems like a good choice for tourism, but in the long term could potentially lead to decreased tourism.

Moreover, the results show that most public services and facilities are improved, considering the tourism product, though communities could benefit from these improvements. For example, improved public transport or public toilets. As an opinion article mentioned: “More public investment in physical and social infrastructure is urgently needed to keep up with tourism development and to ensure a sustainably attractive tourism product.” (Van den Bergh, 2024, para. 3). This further suggests that public improvements are made to enhance the tourism product. This could support transformation, in which both communities and tourists benefit. However, without careful planning, these improvements risk prioritizing tourists over residents, thus reinforcing tourism dependence. While alternative tourism models could support a transformation toward a desirable stable state, current strategies show little effort in that direction. Instead, tourism dependence reinforces itself through infrastructure, skills, and overdevelopment, creating a lock-in effect that limits diversification, thus transformation.

## Theme 2: “Capacity of transformation”

### *“Capacity of government”*

The results, drawing from interviews and government reports, show that the CTB receives the majority of the budget of government-funded sectors, indicating high financial capacity of both the CTB and the government. Furthermore, political support for investors and project developers is high, with the development of hotels and resorts being approved nearly daily. Moreover, economic growth is a key challenge for Curaçao, as a 2015 report described: “Employment, wealth, tax revenue, well-being, and pride are all elements stemming from healthy economic development. In the developing world it is often economic development that leads all other development areas, and is usually at the core of “turn-around” stories.” (Government of Curaçao, Ministry of Economic Development, 2015, p.51). Resulting in government focus on SDG 9, which promotes sustainable economic growth. However, this is not reflected in their strategies or implemented policies, suggesting limited capacity for transformation. Additionally, there were some interviewees’ mentions of oligopolistic structures on the island within the tourism sector, as there are a few companies dominating it. This further indicates limited capacity to facilitate transformation, as decision-making is influenced by these stakeholders. These examples demonstrate that the government has limited capacity for driving transformation toward an alternative stable state with

decreased tourism dependence. As these examples demonstrate how tourism is used for achieving economic growth. Therefore, requiring increased investments for the development of the tourism product.

### *“Capacity of tourism”*

The results, supported by government reports, reveal that the CTB promotes socio-economic development, through implementing retraining programs for tourism related employment. As a CTB (2022) report described:

Curaçao's growing tourism industry has created a strong demand for skilled workers in a variety of roles. To address this need, CTB in collaboration with the Curaçao government, has launched the "Her- en Bijscholingstraject", which means retraining program in Dutch. This program offers free, short- and medium-length courses in a variety of tourism and hospitality roles, including chef, waiter/waitress, bartender, and housekeeping. The courses are delivered using the apprenticeship model, which combines classroom instruction with on-the-job training (p. 41).

However, this exemplifies that the contribution to socio-economic development is tourism-related, further reinforcing tourism dependence. Additionally, tourism in Curaçao is shaped by local and global competition, which limits tourism driving transformation. For instance, if the market demands mass tourism, the stable state remains the same. Suggesting potential for transformation is driven by external influences. Therefore, tourism has limited capacity for transformation.

### *Theme 3: “Competing stable states”*

#### *“Stable state A: High tourism dependence and low socio-economic stability”*

The results, supported by interviews, news articles, and government reports, found several things to be improved, if transformation toward an increased tourism-dependent stable state occurs: education, culture, career opportunities, resident participation, and the tourism product. Similarly, support was shown to incorporate tourism awareness in education. This can help to create an awareness of cultural identity. As tourism growth forced residents and communities to reflect on how they want to present themselves and their island to tourists (interviewee 2, personal communication, July 3 2025). Although differences were found in how to incorporate this. Furthermore, tourists are often attracted to the unique character of the island, for example, the colorful houses and authentic culture. Therefore, tourism development should emphasize this further. However, uncontrolled tourism development has led to a tourism product which is similar to that of other destinations. Thus, reduction of the unique character indicates the loss of culture and authenticity.

Furthermore, residents could increase their engagement with the tourism sector, since awareness among residents of the benefits of tourism should be increased. Most perceive tourism to be limited to providing services and cleaning, though the sector requires technical and administrative skills as well. This highlights shortages of practical employment on the island. Additionally, tourism has been linked to the mitigation of unemployment. Thus, increased investments in skills training

and education should be achieved. Additionally, residents express pride in their island and openness to welcome visitors. These aspects could be used to improve the relationship between tourists and residents. In addition, tourism could be used to address socio-economic challenges that are present on the island, if it's not solely perceived as profit-generating and residents are allowed to further participate. These examples suggest that tourism can support employment and diversification, although that potential depends on investments and education; without that, tourism remains an inhibitor of transformation.

*“Stable state B: High tourism dependence and high socio-economic stability”*

The results, drawing from interviews, news articles, and government reports, show that diversification of the tourism product was commonly mentioned, for instance, focusing on its history and the stories behind buildings. For example, as interviewee 2 (July 3 2025) described:

People who are interested in culture. Attracting people who are interested in the history of slavery. People who are interested in festivals. So there have always been many discussions: how can you diversify tourism? So that you get different kinds of tourism. Not only tourists who come just for the sun and the beautiful beaches, but also people who want to learn something. People who want to learn about the culture. People who want to learn about the history.

This highlights how tourism could be restructured toward attracting other types of tourists. Although discussions have arisen on what type of tourist to attract, ‘rich’ tourists or ‘backpack’ tourists. As this could lead to concerns about the accessibility of visiting the island for tourists. Furthermore, the debates regarding what kind of tourist to attract are twofold: attracting wealthier tourists with the hope that they spend their money and increase the economic impact of tourism, or attracting backpackers and cultural travelers, who are more accessible. Though the important note is that the tourism model should not be limited to mass tourism. Additionally, tourism products should reflect the visitors as well, in order to attract them.

Furthermore, the tourism sector in Curaçao is perceived to be an oligopoly, as there are few companies operating within the tourism sector: TUI, Corendon, and KLM, which suggests limited competition (interviewee 4, personal communication, July 15 2025). This structure limits the diversity and opportunities for diversification of the tourism product, as well as limiting the free market. Therefore, local alternatives and decreasing the dominance of these three companies can help diversify the tourism product. Additionally, the CTB promotes tourism on Curaçao, and tries to remain responsible to the local communities. This indicates that the CTB believes that tourism is a more important pillar in society and should be maintained. As a CTB report mentioned: “Tourism has the power to shape societies, boost economies, and bridge cultural divides. The CTB is at the forefront of Curaçao's tourism initiatives. Beyond promoting the island as a destination, the CTB understands its profound responsibility to the local communities.” (Curaçao Tourist Board, 2022, p19). Yet, the CTB lacks clear strategies on how to achieve these visions. Moreover, improvement of the tourism product could be achieved through utilizing Curaçao's resources. For instance, eco-tourism, which utilizes natural resources, as Curaçao has unique natural areas. Additionally, the cultural and historical dimensions could be used for diversifying the tourism product. These

examples indicate alternatives to the current tourism model on the island, which could attract different types of tourists as well, preferably where transactions are made locally.

Common mentions were found that residents should be involved in tourism development, as employment opportunities within tourism are limited, which was highlighted by interviewee 9 (July 22, 2025):

If they continue on this path, then I think my most important message is: involve the local population in this. Let them also benefit from it. Things that you organize for tourists don't necessarily have to be external. Work together with local entrepreneurs, with the municipality that is active there, so they too can profit from the money that tourism brings in, which should flow back to the local population.

Moreover, tourism-generated profit should remain on the island, suggesting prevention of economic leakages is necessary. In addition to those profits being invested back into the island, to improve the socio-economic conditions of its residents. These examples illustrate the required strategies to implement, under the condition of transformation toward a pro-tourism stable state. Though these strategies have potential in improving the socio-economic conditions.

*“Stable state C: Low tourism dependence and high socio-economic stability”*

The results, supported by news articles, interviews, and government reports, highlight the need for increasing linkages between other economic sectors and tourism should be achieved, though few economically significant sectors exist. This shows the importance of economic diversification. Initiatives, such as a think tank, could help. Furthermore, Curaçao has assets beyond tourism, which could support economic growth, such as industrial terrain from the oil refinery. This illustrates that there are alternative possibilities for economic growth. Furthermore, the government frames its aims around improved quality of life. This is further demonstrated, as a news article on the most recent government program (2025-2029) described: “Central to the program is the ambition to work towards a ‘stronger and fairer Curaçao’ by 2029. (Drayer, 2025, para 2). Although the government aims to renew the national renewal agenda, in which economic strengthening, solid public finances, and social justice are interconnected, no strategies or policies have been implemented. This demonstrates ambitions of the government for achieving a more desirable stable state. Although, it appears that most ambitions will remain on paper, as none of them have been realized. Additionally, there are a few sectors that could help economic recovery: tourism, international finance, oil refinery, government enterprises, and small and medium enterprises. Though the government has created policies that intend to ensure post COVID tourism growth. This highlights a lack of strategies and policies for achieving economic diversification. Similarly, mentions of exploring service related industries were found; little strategies are put in place to expand service-related sectors.

Furthermore, alternative industries could be expanded, for example, the former refinery terrain. Others include investments in transnational education, and investments in ship repair. However, it

is likely that to set up those sectors it might be difficult, as a lot of the expertise has moved to other places. As interviewee 4 (July 15, 2025) mentioned: “A very good question, they are trying something with ship repair. The dry docks where ships are repaired. Yes, they are still officially trying to find an operator for the refinery. But I think that’s a lost cause, because it has already been shut down for five years and is outdated, and fossil fuels in general no longer have the wind at their back.” Similarly, other potential major economic sectors have been neglected by the government, as the government was attending to tourism development. This further highlights challenges for economic diversification. Additionally, economic diversification is a long term process, suggesting the focus on tourism will remain. Together, these examples highlight the support and potential for the alternative stable states. Most support was toward stable state B, as Curaçao has little potential for economic diversification.

#### Theme 4: “The ideal stable state”

The results, drawing from interviews, news articles, and government reports, found that the government frames sustainable development as a goal for Curaçao. In addition to the government envisioning an island where all residents should live enjoyable lives and should be able to enjoy the beauty of the island. Additionally, as a news article described: “With a growing awareness of the risks of unrestrained development, they hope that the government will take action to promote sustainable growth” (Hendriksen, 2024, para. 12). Suggesting controlled growth as a requirement of the desirable stable state. These examples describe aims and goals for the government, which could be regarded as indicators for a desirable stable state. Although there are no extensive and clear mentions of how and when this should occur, suggesting this remains aspirational.

Furthermore, economic diversification is required for a decreased tourism-dependent stable state. Because one-pillar economies are associated with extending risks, and diversification is perceived to be essential for transformation toward an alternative stable state. In addition to government revenue contributing to employment, foreign exchange, and wealth. These were mentioned in the national development plan of 2015, and none of these aims have been achieved as of 2025. The community believes tourism-related income should be reinvested in the island. For instance, in infrastructure and public transportation. Additionally, challenges such as low salaries, inflation, and limited employment opportunities remain. Therefore, these pillars should receive increased attention, which suggests these pillars are mentioned in a desirable stable state.

Several mentions were found of balancing economic sectors on the island, as interviewee 1 (July 4, 2025) described: “Well, to limit it to the 3 P’s: People, Planet, Profit, and so the question is, to what extent are the 3 P’s in balance when you develop tourism again? So how should you develop tourism in order to keep the 3 P’s in balance?” This is further exemplified as interviewee 2 (July 3, 2025) mentioned: “So I think everything has to be in balance, right? Tourism should, in a way, overwhelm the people, but at the same time, they must still feel at home in their own society.” These examples indicate a balance should be achieved between tourism, tourists, and local communities. In addition to improved livability, and inclusivity. These are key components for the achievement of the ideal stable state.

**Table 8**

*Overview of ideal stable state indicators, with related mechanisms and corresponding goals.*

<b>Stable state indicators</b>	<b>Mechanism</b>	<b>Goal</b>
Decreased tourism dependence	Economic diversification	Reduced reliance on tourism
	Development of alternative economic sectors	Mitigation of external shocks
Increased socio- economic stability	Improved investments from government revenue	Contribution to employment, foreign exchange and wealth
	Equal distribution of tourism revenue	Reinvestment in infrastructure and public services
	Development of alternative economic sectors and improving the tourism product	Increased salaries, reduced inflation, increased employment opportunities
Sustainable development	Implementing policies for controlled tourism growth	Balance between tourism growth and carrying capacity.
	Implementing policies for sustainable development	Integration of the 3 P's
Improved quality of life	Improved investments from government revenue	Improved livability, inclusivity, and social equity.
	Improved investments from government revenue	Improved public transport and infrastructure
	Residents participation in the decision making process	Ensuring positive perception regarding tourism
Balanced relation between residents and tourists	Preservation of cultural identity and authenticity	Respectful interactions
	Diversification of the tourism product	Avoiding mass tourism

### *Conclusion*

Together, these themes demonstrate that tourism dependence in Curaçao both inhibits and supports transformation to an alternative stable state. Theme 1 highlighted the tools and strategies for transformation. Showing that barriers to transformation are frequent, resulting in pro-tourism strategies and policies, which lead to increased tourism dependence. Theme 2 demonstrated the limited capacity of both the government and tourism sector for structural change. Although financial resources are available, they are mostly invested in tourism development, resulting in neglect of other sectors. Additionally, the one-pillar economy combined with oligopolistic structures, limit diversification. Therefore, the capacity for transformation toward reduced dependence on tourism is unlikely. Theme 3 illustrated the strategies and aims with the corresponding alternative stable state. Most strategies and aims reinforce tourism dependence, as they focus on diversifying tourism. Although residents participation is encouraged, and increasing awareness among residents on tourism, these aims are framed within tourism. This suggests, that given the initial conditions, stable state B is the most supported and feasible stable state. Lastly, theme 4 explained visions and ideas for the ideal stable state, which is defined by sustainability, inclusivity, and balance between people, planet, and profit. However, these aims remain unimplemented due

to the lack of policies and regulations. Thus, it reflects long-term ambitions, as the ideal stable is less feasible. These findings support H4, as structural limitations, including institutional incentives, limited government capacity, and resident dependence on tourism, inhibit transformation to a desirable alternative stable state. Furthermore, tourism dependence has potential for improvement, such as diversification of tourism products, reinvestment of revenue, and improved infrastructure. Though it mostly inhibits transformation due to limited tourism-related regulations.

## **Discussion**

The outcomes of this research gave insights into how tourism dependency influences the socio-economic stability of Curaçao using an ecological stable state perspective. However, the results should be interpreted with caution, as this research has its limitations. Therefore, this section discusses a reflection of the research process, the limitations of the research, the implications, and recommendations for future research.

### Key findings

Tourism dependence influences the socio-economic stability of Curaçao, as demonstrated by the TEDI values exceeding the 20% threshold from 2012 to 2023. This places Curaçao in stable state A, due to high tourism dependence and low socio-economic stability. Although tourism contributes to Curaçao's GDP and to government income. Its benefits are unequally distributed, as economic vulnerability increased at the community and household levels. This resulted in limited forms of resilience, mainly non-transformative and 'bounce backward' resilience, since government responses are limited and residents seek socio-economic stability elsewhere. Therefore, tourism dependence reinforces increased itself and socio-economic instability, increasing the potential of reaching a 'bounce backward' tipping point. Furthermore, tourism dependence both enables and inhibits transformation; It provides resources and employment, which could support socio-economic improvements. Yet, it reinforces pro-tourism governance and decreases diversification opportunities. This makes stable state B the most feasible stable state to achieve, while the ideal stable state remains a long-term vision. Overall, the results confirm that tourism dependence negatively influences socio-economic stability in Curaçao.

### Interpretations

The results highlight that tourism plays a key role in economic growth, which influences the socio-economic stability. Curaçao's reliance on tourism is confirmed as the TEDI values exceeded the 20% threshold, with the exception of 2020. This correlates with high economic vulnerability and low socio-economic stability, including low wages and limited educational opportunities. Furthermore, tourism dependence correlates with the resilience types: i) Non-transformative resilience, and ii) 'Bounce backward' resilience. These resilience types align with the limited government and community capacity for structural change, which demonstrates that tourism dependence reinforces tourism dependency. Patterns in the data demonstrates that tourism dependence reinforces a feedback loop; As tourism generates revenue leaks to foreign investors, socio-economic stability

weakens. This further increases tourism dependence as a means for economic growth, which results in increased financial leakages. This illustrates how tourism dependence increases the likelihood of reaching a 'bounce backward' tipping point. Additionally, economic diversification is limited, as most government and institutional support is pro-tourism, which suggests tourism myopia (Peterson, 2020), due to tourism supporting economic growth. As a result, other economic sectors receive limited attention. Though the bottom-up perspective demonstrates an alternative dynamic, as reinvestments of tourism revenue are demanded. This suggests that transformation toward Stable state B remains a feasible option, as Stable state D remains aspirational. Furthermore, the results support earlier findings of tourism being used as a driver of economic growth, while highlighting the vulnerabilities associated with mono-economies (Hall & Lamont, 2013; Mahklouf, 2012). In addition to declining non-tourism related sectors (Mitchell & Li, 2017). Similar to earlier findings, tourism dependence resulted in tourism-led inflation in Curaçao (Frent, 2016). As well as the dominance of foreign investors in the tourism sector (Sharpley & Ussi, 2014).

Before 2019, Curaçao's economy was more diversified, which was unexpected, as this suggests a partial economic dependence on tourism. As well as indicating that the shift toward tourism dependence occurred more recently, this demonstrates latent potential for economic diversification. Although, as tourism dependency in Curaçao is still in its early stage, later stages could lead to improved infrastructure. The low socio-economic stability could be due to external shocks and weak governance, independent of tourism. However, the TEDI values suggest that tourism dependence is the dominant driver of low socio-economic stability. Furthermore, the results show that most government strategies and institutional support remain pro-tourism, thus reinforcing tourism dependence. Cultural factors could influence the resilience type, though these are intertwined with the economic context as well. Therefore, the results support the conclusion that tourism dependence influences the socio-economic stability, using an ecological stable state perspective.

### *Theoretical and practical implications*

The results support earlier findings that tourism has positive effects on economic growth and GDP (Cannonier & Burke, 2019; Jurgens *et al.*, 2024). However, the result support tourism influencing inflation, which increases the economic vulnerability of residents (Frent, 2016). This suggests that benefits for residents are limited. Similarly, increased tourism has led to increased strain in energy resources, which is in line with earlier findings (Elgin & Elveren, 2024). Furthermore, the results support the existing theories on the vulnerabilities of mono-economies in SIDS to external shocks, such as the Covid-19 pandemic (Hall & Lamont, 2013; Mahklouf, 2012). Similarly, the results align with Sharpley & Ussi (2014), that foreign investors are responsible for economic leakages. As foreign investors continue to dominate in tourism development, market competition between residents and investors has become more intense, which is in line with neoliberal governance (Hall & Lamont, 2013). However, this results from weak governance, as they rely on tourism for their income and improved economic growth. This is further supported by the results, as structural limitations, such as limited financial capacity, result in inhibiting the potential for transformation.

This supports earlier findings that the transaction costs of mitigating economic vulnerability are high, which suggests that other economic models are not as attractive for SIDS governments (Roberts, 2021). Additionally, this research contributed to new insights by demonstrating how tourism dependence influences the type of resilience. The ecological stable state perspective added a new dimension in linking resilience to tourism dependence.

The results indicate practical implications as well, which translate to policy and governance implications; as tourism growth reinforces a feedback loop, which decreases socio economic stability. Therefore, tourism growth should be controlled using policies and market regulation (Stoffelen & Ioannides, 2022). For example, through regulations of foreign investment, and improved reinvestments of tourism-generated revenue into education, infrastructure, and social services. These reinvestments can strengthen the adaptive capacity and resilience of residents. However, most political actors see no use in implementing alternative models or regulations, due to high competition with other islands (Taylor, 2018). Furthermore, the results demonstrate the importance of resident engagement in tourism, as well as the tourism decision making process. Additionally, employment opportunities should improve, together with improving residents' income, for example, through increasing the minimum wage and improving social services. These efforts could ensure improved sustainable development. Lastly, the results showed the importance of economic diversification. Therefore, investments into alternative industries should be made. For instance, in transnational education and ship repair. Taken together, these implications could gradually decrease tourism dependence and enhance socio-economic stability.

### Limitations

This study was a case study focused on Curaçao, which limits the replicability of the results, as they might not be generalizable to other SIDS. Due to the cultural and social context potentially influencing the results. Furthermore, thematic analysis is subjective; this was mitigated through the use of pre-determined themes, which were based on the conceptual model, reflexive coding, and inclusion and exclusion criteria. However, bias cannot be fully ruled out. Similarly, the ideal stable state is subject to interpretation as well, as the version of the 'ideal stable state' proposed in this study remains interpretive and ideological, and other interpretations are possible. The small sample size limits the generalizability of the findings, as not all perspectives may be represented in the interviews. Although this was overcome through interviewing participants of various backgrounds. The sampling method introduced limitations as well, as participants might share similar networks, thus similar views. Furthermore, the secondary qualitative data contained 29 sources, which ensured coverage of multiple perspectives. However, this may be influenced by bias and selective reporting. Additionally, the time frame of the research might not fully reflect all relevant factors.

Moreover, the TEDI values were calculated without the variable for employment share, which means that the dependence of residents could not be measured. Yet, the index remains valid, as

the other components were calculated, thus could be measured. As well as secondary qualitative data filling this gap. Other limitations include language barriers, which limited access to potentially relevant sources. Though this was mitigated through triangulation and the use of multiple sources. Lastly, limited quantitative data was available, though these gaps were filled using qualitative data. Despite these limitations, the results of the study remain robust. Namely, through the use of multiple data sources, such as secondary qualitative data, interviews, and secondary quantitative data. This approach allowed for triangulation of the data, which increases validity and reduces bias. Although the results should be interpreted with caution, they provide a contribution to understanding how tourism dependence influences socio-economic stability, using an ecological stable state perspective.

### Recommendations

Practical recommendations of this research would be to invest in tourism diversification, to shift from mass or AI tourism to other types of tourism models, such as sustainable tourism or luxurious tourism. Local entrepreneurs and businesses could be incentivized as well to focus on other forms of tourism. This can help to market the destination differently and attract different types of tourists. For example, investing in the tourism industry and attracting other types of tourism businesses. Investments in other economic sectors could be made as well, namely in sectors that serve the tourism industry, as well as other industries, for economic diversification. Additional recommendations would include collaborations between the island's government and the other islands and perhaps the mainland. For example, to enhance travel between the islands and collaboration between local businesses. Several recommendations can be made based on the results; future research could focus on the role of other actors within the stable state, such as foreign investors and other tourism industry- related actors. As well as exploring the interactions between SIDS. Furthermore, future research could focus on improving and expanding the conceptual model. For instance, including cultural and political dimensions and additional variables. Additionally, the conceptual model could be expanded and tested on different SIDS, as the focus on Curaçao limits generalizability. Comparative research could reveal new patterns and insights. Quantitative research could strengthen the understanding of the influence of tourism dependence on socio-economic indicators, as the current results mostly rely on qualitative data. Additionally, policy recommendations can be made; the institutional actors, such as the CTB and MEO, should focus on further developing the tourism product and ensure alternative tourism models decrease economic vulnerability and perturbations on residents. As well as the government of Curaçao investing in economic diversification to minimize tourism dependency.

## Conclusion

This research showed how tourism dependence directly and indirectly influences socio-economic stability by analyzing the effects of tourism dependence on economic vulnerability, resilience, and the adaptive capacity of the government and residents of Curaçao. While the tourism industry provides a key role for economic growth in Curaçao, the results demonstrated that tourism growth gradually evolved into tourism dependence, which resulted in adverse effects on socio-economic stability. Although economic growth can improve the overall well-being of communities, it raises concerns about whether tourism growth results in sustainable economic growth. This aligns with the influence of neoliberal ideologies within politics (Hall & Lamont, 2013), as the favoring of tourism growth by the government leads to challenges for residents. Though this favoring could partly be explained by international tourism growth (Sharpley & Ussi, 2014), SIDS are filling market gaps for tourism. However, the results highlighted the consequences associated with mono-economies, namely economic downturns, which reinforced economic vulnerability and limited resilience. This illustrates the influence of tourism dependence on governmental decision-making, and the behavior of residents and their socio-economic stability in SIDS.

Although the ecological stable state framework shows a simplistic relationship between the actors and tourism dependence, this influences how the results are interpreted. It highlights how integrating socio-economic stability with an ecological stable state perspective helps to understand the complexity of the socio-economic system in Curaçao. Therefore, the government should ensure controlled tourism growth and improve engagement of residents in the decision making process to mitigate the negative consequences. In addition to improved reinvestments of tourism generated revenue and prevention of financial leakages to foreign investors. Using these improvements, tourism dependence could positively contribute to socio-economic stability in SIDS. Without the structural limitations of this research, this study could extend in several directions. For example, exploring other tourism-dependent SIDS and their tourism development strategies. In addition to exploring how these strategies are evolving. The relationship between the actors could be further examined as well, through examining whether tourism policy is shaped through the influence of business actors or governments to attract investments. For example, to assess the degree of regulatory capture. Additionally, this research could be extended into how anti-tourism movements in tourism-dependent destinations develop, operate, and influence tourism development.

## References

- Adger, W. N. (2000). Social and ecological resilience: are they related?. *Progress in human geography*, 24(3), 347-364.
- Antilliaans Dagblad. (2023, October 16). *CASHA: Corendon krijgt te veel macht*. [https://antilliaansdagblad.com/nieuws-menu/28477-casha-corendon-krijgt-te-veel-macht#:~:text=Het totaalaantal kamers varieert ook,Curaçao heeft momenteel 8.500 kamers.](https://antilliaansdagblad.com/nieuws-menu/28477-casha-corendon-krijgt-te-veel-macht#:~:text=Het%20totaalaantal%20kamers%20varieert%20ook,Cura%C3%A7ao%20heeft%20momenteel%208.500%20kamers.)
- Antilliaans Dagblad. (2024, April 15). *Belang toerisme stijgt hard*. <https://antilliaansdagblad.com/nieuws-menu/29306-belang-toerisme-stijgt-hard>
- Antilliaans dagblad. (2024, June 5). *Werkeloosheid Curaçao gedaald*. Antilliaans dagblad. [https://antilliaansdagblad.com/curacao/29544-werkeloosheid-curacao-gedaald#:~:text=Als gekeken wordt naar het,procentpunten ten opzichte van 2011.](https://antilliaansdagblad.com/curacao/29544-werkeloosheid-curacao-gedaald#:~:text=Als%20gekeken%20wordt%20naar%20het,procentpunten%20ten%20opzichte%20van%202011.)
- Balcilar, M., Kutan, A. M., & Yaya, M. E. (2017). Testing the dependency theory on small island economies: The case of Cyprus. *Economic Modelling*, 61, 1-11.
- Beisner, B. E., Haydon, D. T., & Cuddington, K. (2003). Alternative stable states in ecology. *Frontiers in Ecology and the Environment*, 1(7), 376-382.
- Braun, V., Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. Sage.
- Broekman, M. J., Muller-Landau, H. C., Visser, M. D., Jongejans, E., Wright, S. J., & De Kroon, H. (2019). Signs of stabilisation and stable coexistence. *Ecology letters*, 22(11), 1957-1975.
- Cannonier, C., and Burke, M. G. (2019). The economic growth impact of tourism in small island developing states—evidence from the Caribbean. *Tourism Econ.* 25, 85–108. doi: 10.1177/1354816618792792
- Capocchi, A., Vallone, C., Pierotti, M., and Amaduzzi, A. (2019). Overtourism: a literature review to assess implications and future perspectives. *Sustainability* 11, 3303. doi: 10.3390/su11123303
- Cardoso, F. H. (2009). New paths: Globalization in historical perspective. *Studies in Comparative International Development*, 44(4), 296-317.
- Caulfield, J. (2023, June 22). How to Do Thematic Analysis | Step-by-Step Guide & Examples. Scribbr. Retrieved July 23, 2025, from <https://www.scribbr.com/methodology/thematic-analysis/>

- Chaperon, S., & Bramwell, B. (2013). Dependency and agency in peripheral tourism development. *Annals of tourism research*, 40, 132-154.
- Chen, F., Xu, H., & Lew, A. A. (2020). Livelihood resilience in tourism communities: The role of human agency. *Journal of Sustainable Tourism*, 28(4), 606-624.
- Cote, M., & Nightingale, A. J. (2012). Resilience thinking meets social theory: Situating social change in socio-ecological systems (SES) research. *Progress in human geography*, 36(4), 475-489.
- Curaçao Tourist Board. (2021). *The strategic tourism destination development plan 2022–2026*.
- Curaçao Tourism Board. (2022). *Social Impact Report CTB 2021-2022*.
- Dal Bó, E. (2006). Regulatory capture: A review. *Oxford review of economic policy*, 22(2), 203-225.
- Dinica, V. (2012). Tourism on Curaçao: Explaining the shortage of sustainability legislation from game theory perspective. *Journal of Environmental Policy & Planning*, 14(2), 161-188.
- Donohue, I., Petchey, O. L., Montoya, J. M., Jackson, A. L., McNally, L., Viana, M., ... & Emmerson, M. C. (2013). On the dimensionality of ecological stability. *Ecology Letters*, 16(4), 421-429.
- Dossier Koninkrijksrelaties. (2024, August 3). Column – Overtoerisme. Dossier Koninkrijksrelaties. <https://dossierkoninkrijksrelaties.nl/2024/08/03/column-overtoerisme/>
- Drayer, D. (2020, April 16). *Op Curaçao dreigen 50.000 mensen door armoedegrens te zakken*. NOS Nieuws. <https://nos.nl/artikel/2330725-op-curacao-dreigen-50-000-mensen-door-armoedegrens-te-zakken>
- Drayer, D. (2020, September 14). *Armoede op Curaçao steeds zichtbaarder*. Curaçao.nu.
- Drayer, D. (2025, April 5). *Zakito-lagune wordt schoongemaakt voor toerisme*. Curaçao.nu. <https://curacao.nu/en/zakito-lagune-wordt-schoongemaakt-voor-toerisme/>
- Drayer, D. (2025, April 29). *Curaçao en Spanje willen nieuwe hotelketen op het eiland*. Curaçao.nu.
- Elgin, C., & Elveren, A. Y. (2024). Unpacking the economic impact of tourism: A multidimensional approach to sustainable development. *Journal of Cleaner Production*, 478, 143947.
- Filiposki, O., Ackovska, M., Petroska Angelovska, N., & Metodijeski, D. (2016). Socio-economics impacts of tourism. *Economic Development*, 18(1-2), 125-155.

- Frent, C. (2016). An overview on the negative impacts of tourism. *Revista de turism-studii si cercetari in turism*, (22).
- Goede, M. P., & Meulens, O. (2009, April). Sustainable Development of Small Island Developing States: The Case of Curaçao. In 2009 International Association of Computer Science and Information Technology-Spring Conference (pp. 608-612). IEEE.
- Gounder, A., & Cox, C. (2022). Exploring the role of tourism dependency on COVID-19 induced economic shock in the Small Island Developing States. *Current Issues in Tourism*, 25(7), 1151-1168.
- Government of Curaçao, Ministry of Economic Development. (2015). *Building on strengths: National development plan Curaçao 2015–2030*.
- Haini, H., & Loon, P. W. (2023). Tourism dependency and residents' happiness. *Annals of Tourism Research*, 101, 103580.
- Hall, P. (2001). An introduction to varieties of capitalism. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage/OUP*.
- Hall, P. A., & Lamont, M. (Eds.). (2013). *Social resilience in the neoliberal era*. Cambridge University Press.
- Hendriksen, K. (2023, September 16). *Recordaantal toeristen op Curaçao, maar kleine hotels blijven leeg* [Record number of tourists on Curaçao, but small hotels remain empty] Caribisch netwerk. <https://caribischnetwerk.ntr.nl/2023/09/16/recordaantal-toeristen-op-curacao-maar-kleine-hotels-blijven-leeg/>
- Hendriksen, K. (2024, November 25). *Curaçao op een kruispunt: De oproep voor duurzaam toerisme en ontwikkeling*. Caribisch Netwerk.
- Henriquez, C. (2023, April 12). *Tourism in Curaçao: Facts & figures*. Presentation at the Symposium of the Dutch Caribbean Association of Economists, Willemstad, Curaçao.
- Hung, C. H., & Wu, M. T. (2017). The influence of tourism dependency on tourism impact and development support attitude. *Asian Journal of Business and Management*, 5(2).
- International Monetary Fund. (2024, June 25). *Kingdom of the Netherlands – Curaçao: Staff Concluding Statement of the 2024 Article IV Mission*. <https://www.imf.org/en/News/Articles/>

- Jafari, J., & Xiao, H. (2015). Dependency theory, tourism. *Encyclopedia of Tourism*.
- Jurgens, S. S., Mijts, E., & Van Rompaey, A. (2024). Are there limits to growth of tourism on the Caribbean islands? Case-study Aruba. *Frontiers in Sustainable Tourism*, 3, 1292383.
- Koopman, D. (2025, 18 March). *Arme wijken op Curaçao blijven jaar in, jaar uit in de problemen: Ser'i Papaya (1)*. Caribisch Netwerk. <https://caribischnetwerk.ntr.nl/2025/03/18/arme-wijken-op-curacao-blijven-jaar-in-jaar-uit-in-de-problemen-seri-papaya-1/>
- Kotsis, N., & Botsis, M. (2024). Theories of Dependency and Tourism. *International Journal of Research Publication and Reviews* Vol 5, no 3, pp 5492-5504.
- Lamothe, K. A., Somers, K. M., & Jackson, D. A. (2019). Linking the ball-and-cup analogy and ordination trajectories to describe ecosystem stability, resistance, and resilience. *Ecosphere*, 10(3), e02629.
- Leiper, N. (1979). The framework of tourism: Towards a definition of tourism, tourist, and the tourist industry. *Annals of Tourism Research*, 6(4), 390-407.
- Mak, M. (2025, June 2). Analyse: Lagere inkomens profiteren weinig van economische groei Curaçao. Dossier Koninkrijksrelaties. <https://dossierkoninkrijksrelaties.nl/2025/06/02/analyse-lagere-inkomens-profileren-weinig-van-economische-groei-curacao/>
- Makhlouf, H. H. (2012). The multi-dimensional impact of international tourism. *The International Business & Economics Research Journal (Online)*, 11(2), 233.
- Manhães, A. P., Pantaleão, L. C., Moraes, L. F., Amazonas, N. T., Saavedra, M. M., Mantuano, D., & Sansevero, J. B. (2022). Functional trajectory for the assessment of ecological restoration success. *Restoration Ecology*, 30(8), e13665.
- Martin del Campo, F., Singh, S. J., & Mijts, E. (2023). The resource (in)sufficiency of the Caribbean: Analyzing socio-metabolic risks (SMR) of water, energy, and food. *Frontiers in Climate*, 5, 1085740. <https://doi.org/10.3389/fclim.2023.1085740>
- Mitchell, J., & Li, S. (2017). Autonomy found: Estimating the local benefit from tourism in SIDS—the case of Cape Verde. *Journal of Policy Research in Tourism, Leisure and Events*, 9(2), 182-200.

- Monterrubio, C., Osorio, M., & Benítez, J. (2018). Comparing enclave tourism's socioeconomic impacts: A dependency theory approach to three state-planned resorts in Mexico. *Journal of destination marketing & management*, 8, 412-422.
- Mumby, P. J., Chollett, I., Bozec, Y. M., & Wolff, N. H. (2014). Ecological resilience, robustness and vulnerability: How do these concepts benefit ecosystem management? *Current Opinion in Environmental Sustainability*, 7, 22-27.
- Nagalingam Nagendrakumar, A. A. L., Ragalage, K., Jayasuriya, G. T., Ravisara, H. G. A. M., Weerawickrama, M. J., & Madushan, M. G. D. (2019). Socio-Economic Factors and Tourism–Impact Analysis using Indicator Approach.
- NOS. (2020, June 25). *Onrust op Curaçao zal ook hier gevolgen hebben*. <https://nos.nl/artikel/2338759-onrust-op-curaçao-zal-ook-hier-gevolgen-hebben>
- Ortega, B., & Ribeiro, M. A. (2025). An index of the economic dependence on Tourism. *Tourism Economics*, 31(3), 426-452.
- Overheid van Curaçao. (2017). *Regeerprogramma 2017–2021: Ontplooiën van Curaçao's potentieel*.
- Overheid van Curaçao. (2022). *Regeerprogramma 2022–2025: Op weg naar herstel en een betere kwaliteit van leven voor het volk* [PDF]. <https://gobiernu.cw/wp-content/uploads/2022/04/Regeerprogramma-2022-2025-Gobiernu-di-Korsou.pdf>
- Peterson, R. R. (2020). Over the caribbean top: community well-being and over- tourism in small island tourism economies. *Int. J. Commun. Well-Being* 18, 1–38. doi: 10.1007/s42413-020-00094-3
- Puig-Cabrera, M., & Foronda-Robles, C. (2019). Tourism, smallness and insularity: a suitable combination for quality of life in Small Island Developing States (SIDS)?. *Island Studies Journal*, 14(2), 61-79.
- Pratt, S. (2015). The economic impact of tourism in SIDS. *Annals of tourism research*, 52, 148-160.
- Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative research in accounting & management*, 8(3), 238-264.  
<https://delvetool.com/blog/thematicanalysis>

- Roberts, S. (2021). Conceptualizing resilience in small island states. In *Managing Crises in Tourism: Resilience Strategies from the Caribbean* (pp. 33-64). [https://doi.org/10.1007/978-3-030-55151-9\\_3](https://doi.org/10.1007/978-3-030-55151-9_3)
- Scheyvens, R., & Momsen, J. H. (2020). Tourism and poverty reduction: Issues for small island states. In *Tourism and Sustainable Development Goals* (pp. 111-129). Routledge.
- Scoones, I. (1999). New ecology and the social sciences: what prospects for a fruitful engagement?. *Annual review of anthropology*, 28(1), 479-507.
- Semrad, K., & Rivera, M. (2015). A destination performance analysis through the comparison of tourists and stakeholders' perceptions: The case of Curacao. *Journal of Tourism & Hospitality*, 4(171), 2.
- Sharpley, R. (2022). Tourism and development theory: Which way now?. *Tourism Planning & Development*, 19(1), 1-12.
- Sharpley, R., & Ussi, M. (2014). Tourism and governance in small island developing states (SIDS): The case of Zanzibar. *International journal of tourism research*, 16(1), 87-96.
- Smith, T. (1979). The underdevelopment of development literature: the case of dependency theory. *World Politics*, 31(2), 247-288.
- Stoffelen, A., and Ioannides, D. (2022). *Handbook of Tourism Impacts: Social and Environmental Perspectives*. London: Edward Elgar Publishing.
- Taylor, D. (2018). Tourism and development in the Senian context: Does it help or hurt SIDS? The case of Aruba. *Journal of Tourism and Hospitality Management*, 6(3), 100-108. <https://doi.org/10.17265/2328-2169/2018.03.003>
- Tausch, A. (2010). Globalisation and development: the relevance of classical 'dependency' theory for the world today. *International Social Science Journal*, 61(202).
- Tromp, E. (2015, March 25). *How can we shape a better future for the Curaçao tourism industry?* Keynote speech presented at the annual general meeting of the Curaçao Hospitality and Tourism Association, Willemstad, Curaçao.
- UNHCR. (n.d.). *About Curaçao – Help.UNHCR.org*. UNHCR. Retrieved June 17, 2025, from [https://help.unhcr.org/curacao/nl/about-aruba/#:~:text=Curaçao heeft een totale oppervlakte,165.000 inwoners \(schatting 2023\).](https://help.unhcr.org/curacao/nl/about-aruba/#:~:text=Curaçao heeft een totale oppervlakte,165.000 inwoners (schatting 2023).)

- van Dam, O. (2023, July 14). *Groeiende armoede: Curaçao verhoogt onderstandsuitkering*. Caribisch netwerk. <https://caribischnetwerk.ntr.nl/2023/07/14/groeiende-armoede-curacao-verhoogt-onderstandsuitkering/>
- Van den Bergh, R. O. B. (2024, May 3). *Opinie: Toerismelessen voor Curaçao*. Antilliaans Dagblad. <https://antilliaansdagblad.com/nieuws-menu/curacao/opinie/29370-opinie-toerismelessen-voor-curacao>
- Van Meerbeek, K., Jucker, T., & Svenning, J. C. (2021). Unifying the concepts of stability and resilience in ecology. *Journal of Ecology*, 109(9), 3114-3132. \
- Voermans, T. (2024, November 15) *Curaçao kan de groei van het toerisme niet bijbenen* [Curaçao cannot keep up with tourism growth] Parool. <https://www.parool.nl/wereld/curacao-kan-de-groei-van-het-toerisme-niet-bijbenen~be050947/>

## Appendix A: Methodology

This appendix provides the methodology of the research process used in this study. This includes the protocol for calculation of the tourism economic dependency index (TEDI) and the development of the codebook for the qualitative coding used in this study. In addition to the codes used for analysis. The methodology will be explained per subquestion in the following sections.

### Sub-question 1

#### Research design

The overall approach to answering this sub question was a quantitative method, using the tourism economic dependency index (TEDI). This index was developed to measure the degree of economic tourism dependency in countries (Ortega & Ribeiro, 2025), hence this index was chosen. Various indicators were used to measure TEDI, as shown in table 1. The adjustment factors account for economic complexity, as not every tourist dependent destination has little economic diversification. The data was analyzed using R, in addition changes in the index were measured with a time series analysis. However, an adapted version of TEDI was used, due to insufficient data for two of the indicators.

The purpose of TEDI is to measure the economic reliance on tourism, and it can help identify if a country is at risk of a development trap (Ortega & Ribeiro, 2025). The index differentiates between tourism specialization and economic dependence as well, through the use of the adjustment indicators (table 1). The use of TEDI was justified, as it can help identify when and where economic diversification is needed. Additionally, it helps illustrate vulnerabilities if tourism is declining.

The adjustment indicators were used as to adjust for the tourism dependency indicators, to provide a more comprehensive understanding of the index's values. As these adjustment factors account for contributions to the economy other than tourism. For instance, a country can have large contributions from the tourism sector to its economy, yet still have a diversified economy.

**Table 1.**

TEDI indicators

<b>Tourism dependency indicators</b>	<b>Definition</b>
Percentage of contribution of tourism to GDP	The share of tourism to GDP
Percentage of tourism export of the total exports	The share of tourism exports
<b>Adjustment indicators</b>	<b>Definition</b>
Manufacturing Value Added per capita (MVA index)	Industrial productivity and development of a country
Percentage of high tech exports of total exports	The share of global high tech exports

### Data collection

The collected data consisted of the indicators mentioned in table 1. The data was obtained through various sources containing these indicators on annual basis. The data was collected through desk research. No specific protocols were used for this data collection. However, there was no available data on. The percentage of tourism employment and the percentage of industry employment as an adjustment factor. Therefore, an adapted TEDI calculation was used.

### Data analysis

As mentioned earlier the data was analyzed through the calculation of TEDI. TEDI consists of three components, with adjustments for economic complexity and competitiveness (Ortega & Ribeiro, 2025). TEDI was calculated in R, and each component was calculated as follows; component 1 (C1) consists of the Percentage of contribution of tourism to GDP \* (1- Manufacturing Value Added per capita), C2 consists of Percentage of tourism employment as a share of the total employment \* (1- Percentage of industry employment of total employment ), and C3 consists of Percentage of tourism export of the total exports \* (1- Percentage of high tech exports of total exports). TEDI is calculated using each of these components;  $TEDI = (C1 \times C2 \times C3)^{1/3}$ . The threshold for tourism dependence was set at 20%, indicating that TEDI higher than 20 reflects tourism dependence. The TEDI values range from 0 to 100.

Each component was calculated as:

$$C1 = TCGDP * (1 - MVA)$$

$$C2 = TCEM \times (1 - EMIN)$$

$$C3 = ITEX \times (1 - HTES)$$

However, due to the unavailable C2 component, TEDI was calculated as:

$$TEDI = \sqrt{C1 \times C3}$$

Although, the data for component 2 was unavailable. Therefore, C2 was left from the calculation of TEDI. TEDI was calculated as such;  $TEDI = \sqrt{C1 \times C3}$ . However, this led to the calculations of TEDI being less robust, due to the missing C2 component. Furthermore, the TCGDP had to be calculated using the economic impact of tourism and calculating it as a percentage of the GDP of Curaçao. Additionally, for some years the data on the TCGDP was missing, which was calculated using regression imputation. This was used as it remains consistent with the other variables, as the TCGDP was calculated using two other variables. The HTES data for Curaçao was placed at zero, as Curaçao does not have high tech exports. Additionally, TEDI was analyzed using regression analysis in R, the R script that was used can be found in appendix E.

### Limitations

The major limitations were the missing C2 component in the final data set for calculating TEDI. This decreased robustness of the TEDI value as it does not include any data on the employment share. Therefore, this TEDI is solely based on the contribution of tourism to the GDP and the share of tourism of the total exports, together with their corresponding adjustment factors. In addition, some values of the TCGDP were missing, which were calculated using regression imputation. However, the use of regression imputation underestimates variability in the data. Therefore, the imputed values may not reflect the actual value of the variable. These limitations lead to the TEDI values per year not being a reflection of the actual TEDI value. Yet, this TEDI value does provide an estimate on the tourism economic dependency in Curaçao, as well as demonstrating trends and patterns of the TEDI values over the years.

### **Sub-question 2 & 3**

#### Research design

The overall approach for the second, third, and fourth question was similar, as they all consisted of qualitative data and the use of qualitative data analysis. The second and third subquestions are related to each other, as the type of resilience determines the potential for reaching a tipping point. Therefore, the same set of sources was used to address both sub questions. The resilience and tipping points were measured and analyzed through qualitative data analysis; using a combination of deductive and inductive coding, a thematic analysis was performed. The codes that were used are based on table 2 and shown in table 4, to determine the perturbations that occur, and consequently the reactions to the perturbations to assess the resilience. Furthermore, the level of resilience was determined using the adapted PESTE-type framework and the potential of reaching a tipping point was determined using the conceptual model.

#### Data collection

The data consisted of secondary qualitative data, and was collected through desk research. Most data was obtained through news articles, governments and institutional reports. The secondary qualitative data consisted of news articles, ranging from three major news outlets in Curaçao: Curaçao.nu, Caribisch netwerk, and Antilliaans Dagblad. These were chosen as they are most likely to capture the events occurring on Curaçao, as two of them are local news outlets. Other news sources included NOS. This type of data was chosen as there is limited access to primary data, namely due to time and financial constraints. In addition, there is little quantitative data. The sample was sufficient to reach saturation, and it represents multiple perspectives related to tourism dependence, which helps decrease bias in the sample. Additionally, the use of news articles helped capture the events on Curaçao, as they are time sensitive. Therefore, this type of data was still sufficient to answer the sub questions. The data was selected through purposive sampling, using several different search terms all relating to the impact of tourism in Curaçao, tourism in

Curaçao, socio economic stability of Curaçao, and responses to tourism in Curaçao. See appendix B for an overview of the qualitative and quantitative sources that were used.

Inclusions criteria included that the article must be on Curaçao, they must address tourism and its impact, whether positive or negative to reduce bias. They needed to contain mentions of the appropriate actors; government and residents of Curaçao. Additionally, they need to be written in English or Dutch and published by credible sources. Exclusion criteria included that the article did not mention both or either actors, or if sources lacked reliability. The time frame for the data was 2015-2025, as before 2019 Curaçao had multiple pillars in their economy and after 2019 they did not. The data collection stopped when during the data analysis a saturation point was reached, and new data did not provide new insights.

### Data analysis

The data was processed and analyzed through qualitative coding. The codes that were used were based on the framework and the literature review. See appendix D for the full codebook.

The qualitative coding consisted of a combination of inductive and deductive coding, as some of the codes were predetermined and the other codes were created based on the data (Braun & Clarke, 2013). The predetermined codes made sure that the data would be more consistent, and the rest of the codes flowed as the coding went on. To ensure inter coder reliability the data was coded in multiple rounds. The first round of coding consisted of highlighting the secondary qualitative data, and grouping them into the predetermined codes. The later rounds of coding consisted of refining the code names and regrouping certain code excerpts under different code names. Each code excerpt was summarized to further define and assess the excerpt and to ensure it was placed under the appropriate code. Inter coder reliability was further ensured through the use of inclusion and exclusion criteria for each of the codes, and through the use of definitions of the predetermined codes. After the qualitative coding was finalized, the codes were grouped into predetermined themes (Caulfield, 2023). The themes for the second sub question were based on the PESTE- Type framework. The themes of the fourth sub question were based on framework on how tipping points are reached (figure 5). However, there was room to develop additional themes, as the chosen approach was a combination between inductive and deductive coding. Additionally, a latent approach was chosen, which means reading into the assumptions and subtext of the data (Caulfield, 2023). An overview of the themes and their definitions is shown in table 2. The full codebook can be accessed in Appendix D.

Table 2. Overview of themes for the thematic analysis. The initials code book was based on this table. The final code book will be in appendix D.

<b>Themes</b>	<b>Definition</b>
The current stable state	Economic vulnerability of residents caused by tourism dependence
Tourism's influence on the current stable state	The influence of tourism on the current stable state
Resilience	Social or community resilience exhibited by residents of Curaçao
Perceptions influencing resilience	The perceptions or views of residents on tourism that can influence resilience.
Perturbations	The economic benefits of tourism
Capacity to deal with disturbances	The adaptive capacity of residents when faced with the impact of tourism
Trajectory	The trajectory that was followed, or should be followed to lead to a certain stable state.

For a full overview of the themes, their codes, definitions and the inclusion and exclusion criteria see the appendix.

### Limitations

Inter coder reliability was ensured by coding some articles a second time to ensure the same themes and codes would emerge. Additionally, the codebook contained inclusion and exclusion criteria for each of the codes. The number of qualitative data dependent on the saturation point, and data collection stopped when a saturation point was reached. The saturation point was set on the point where no new themes would emerge. Furthermore, the secondary data mostly consists of news articles. However some articles could contain biases by the author, therefore, the articles were assessed for credibility, and triangulation to ensure that the articles contain truthful information. The tone and words of the article were also carefully assessed to ensure that the information wasn't biased. However, some articles and sources were not written in English or Dutch, hence they could not be used. This means however, that potentially important data was not included in the sample. For example, the most recent government program was only published in Papiamentu. However, this was overcome by using Dutch or English summaries of these articles. This does indicate that the full message of the original source might not have been come across.

### **Sub-question 4 & interview guide**

The aim of this question is to identify policies that address poverty reduction and tourism dependency in SIDS. Therefore, only qualitative data was used, and it was analyzed through inductive coding, as transformation also depends on the tipping points and the size of the perturbations and resilience determined in sub question 1 and 2. The codes were based on strategies that aim to reduce poverty or address economic diversification. Additionally, the

qualitative data was used to make recommendations for transformation. Therefore, the initial coding scheme included themes relating to transformation or change and reducing tourism dependency.

### Research design

The overall approach for the fourth subquestion was similar to that of the second and third sub question. All included the collection and analysis of secondary qualitative data. The qualitative data was obtained via desk research using articles from newspapers, government reports, policy papers, and news articles. The time frame of the data was from 2015-2025. Furthermore, this question made use of primary qualitative data, in the form of semi-structured interviews.

The purpose of the interviews was to gather extra data, that could not be accessed through secondary qualitative data. Furthermore, the interviews explored how tourism dependence could be used for transformation. The interviewees helped to gain insights in how tourism can help a destination transform for the better, or into a more desired destination for residents. Additionally, the interviewees shared their thoughts on how tourism has formed or shaped the island and how tourism has changed it over the years. They shared their thoughts on what tourism should look like in order to transform to a desirable stable state as well.

### Interview sample

The sample size for the interviews consisted of nine interviewees. Although this sample size is small, the interviews were semi structured, which allowed for more in depth interviews. In addition, this helped for interactive interviews, as this enables to probe deeper on to what was said previously by the interviewee to gain more insight in their perspectives on a particular question. Thus, producing a richer data set. The participants were selected through convenience sampling and snowball sampling. Inclusion criteria consisted of individuals who have a connection to Curaçao, for instance residing there. Or individuals who have differing opinions regarding tourism on the island as to minimize bias. The participants ranged from being (former) residents, experts on governance and tourism entrepreneurs.

### Data collection

#### *Secondary qualitative data*

Similar to the second and third sub question, the data consisted of secondary qualitative data, and was collected through desk research. Most data was obtained through news articles, governments and institutional reports. This type of data was chosen as there is limited access to primary data, namely due to time and financial constraints. In addition, there is little quantitative data. The sample was sufficient to reach saturation, and it represents multiple perspectives related to tourism dependence, which helps decrease bias in the sample. Additionally, the use of news articles helped capture the events on Curaçao, as they are time sensitive. Therefore, this type of data was

still sufficient to answer the sub questions. The data was selected through purposive sampling, using several different search terms all relating to tourism dependence in Curaçao, socio economic stability of Curaçao, and transformation.

The inclusion criteria were that the source must mention Curaçao or other tourism dependent SIDS, They needed to contain mentions of the appropriate actors; government and residents of Curaçao. Additionally, they need to be written in English or Dutch and published by credible sources. Exclusion criteria included that the article did not mention both or either actors, or if sources lacked reliability. The time frame for the data was 2015-2025, as before 2019 Curaçao had multiple pillars in their economy and after 2019 they did not. The data collection stopped when during the data analysis a saturation point was reached, and new data did not provide new insights.

#### *Primary qualitative data*

The primary qualitative data consisted of interviews with the relevant stakeholders, they included, but were not limited to, experts on tourism and governance, residents of Curaçao and hospitality experts. The sample size was 9 interviews, which was due to time constraints. Interviewees were chosen through snowball sampling, in order to expand the number of interviewees. To prevent only speaking to people who the first interviewee agrees with, is to diversify the contacts for the interviews and use snowball sampling to increase the number of interviewees after, and to set criteria for who can be interviewed and who cannot. The interviews helped to create data that was not available through datasets or articles as well.

The interviewees were contacted through email for participation, the email included an information sheet and the informed consent sheet. All interviews were conducted through Microsoft Teams and they were recorded and transcribed using verbatim transcription to fully capture everything that was said by the interviewees.

#### *Development of the interview guide*

An interview guide was developed based on an article on qualitative research interviews (Qu & Dumay, 2011). The questions for the interview guide were based on the themes discussed in the subquestion, the literature review, and the framework. The key themes that were discussed included; tourism dependence, the challenges and benefits of tourism, transformation and the barriers and enablers of transformation, and alternative scenarios. The questions were open ended to ensure more in depth answers and insights shared by the interviewee. The interview guide can be accessed through Appendix C. Additionally, the interview guide strived to remain neutral in the interview questions, to avoid bias and not to favor certain answers over others.

## Data analysis

The secondary and primary qualitative data was processed and analyzed through qualitative coding and thematic analysis. The codes that were used were based on the framework and the literature review. See appendix D for the full codebook. The data analysis for the fourth sub question was conducted in a similar manner to the second and third subquestion, as thematic analysis was used. The codebook did contain different code names and different themes arose from the thematic analysis.

The qualitative coding consisted of a combination of inductive and deductive coding, as some of the codes were predetermined and the other codes were created based on the data (Braun & Clarke, 2013). The predetermined codes made sure that the data would be more consistent, and the rest of the codes flowed as the coding went on. To ensure inter coder reliability the data was coded in multiple rounds. The first round of coding consisted of highlighting the secondary qualitative data, and grouping them into the predetermined codes. The later rounds of coding consisted of refining the code names and regrouping certain code excerpts under different code names. Each code excerpt was summarized to further define and assess the excerpt and to ensure it was placed under the appropriate code. Inter coder reliability was further ensured through the use of inclusion and exclusion criteria for each of the codes, and through the use of definitions of the predetermined codes. After the qualitative coding was finalized, the codes were grouped into predetermined themes (Caulfield, 2023).

The themes for the fourth sub question were based on the themes of the interview guide, the literature review, and the conceptual model. However, there was room to develop additional themes, as the chosen approach was a combination between inductive and deductive coding. Additionally, a latent approach was chosen, which means reading into the assumptions and subtext of the data (Caulfield, 2023). An overview of the themes and their definitions is shown in table 3. The full codebook can be accessed in Appendix D.

Table 3. Overview of themes for the thematic analysis. The initials code book was based on this table. The final code book will be in appendix D.

<b>Themes</b>	<b>Definition</b>
Transformation	Actions or policies with an outcome that leads to transformation to an alternative stable state.
Capacity for transformation	The adaptive capacity for transformation to an alternative stable state
Competing stable states	The potential alternative stable states
The ideal stable state	A stable state with decreased tourism dependency

For a full overview of the themes, their codes, definitions and the inclusion and exclusion criteria see the appendix.

### Ethical and practical considerations

The use of primary data can lead to ethical considerations. This was prevented through the use of an informed consent sheet for interviewees. This contains information on the purpose of the study, the procedures and risks. Written consent was obtained before participation in the interviews. Furthermore, participants were allowed to withdraw at any time without consequences. The participants' identity was protected through anonymization of the primary qualitative data. Therefore, the interviews cannot be traced back to the individuals participating in the interviews. Additionally, the data was stored in a private manner. The recordings of the interviews were later destroyed and the only the transcribed interviews were kept for thematic analysis. Each transcription contained numbers of the interviewees instead of their names.

### Limitations

The small sample size limits the generalizability of the findings, as not all perspectives may be represented in the interviews. Although, this was attempted to be overcome through interviewing participants of various backgrounds. The sampling method introduced limitations as well, as participants might share similar networks, thus similar views. Furthermore, the use of secondary data can lead to bias due to framing or selective reporting. However, this was overcome through diversification of the sources. Additionally, the time frame of the data might not reflect all the factors that could influence transformation.

### **References**

- Braun, V., Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. Sage.
- Ortega, B., & Ribeiro, M. A. (2025). An index of the economic dependence on Tourism. *Tourism Economics*, 31(3), 426-452.
- Caulfield, J. (2023, June 22). How to Do Thematic Analysis | Step-by-Step Guide & Examples. Scribbr. Retrieved July 23, 2025, from <https://www.scribbr.com/methodology/thematic-analysis/>
- Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative research in accounting & management*, 8(3), 238-264.  
<https://delvetool.com/blog/thematicanalysis>

## Appendix B: Data sources

This appendix contains the data sources that were used during this study.

### Primary qualitative sources

Interviewee 1, personal communication, July 3 2025  
Interviewee 2, personal communication, July 4 2025  
Interviewee 3, personal communication, July 7 2025  
Interviewee 4, personal communication, July 15 2025  
Interviewee 5, personal communication, July 14 2025  
Interviewee 6, personal communication, July 21 2025  
Interviewee 7, personal communication, August 6 2025  
Interviewee 8, personal communication, July 29 2025  
Interviewee 9, personal communication, July 22 2025

### Secondary qualitative sources

Antilliaans Dagblad. (2025, June 29). *Curaçao meer dan 'bestemming'*. *Antilliaans Dagblad*. <https://antilliaansdagblad.com/nieuws-menu/curacao/31355-curacao-meer-dan-bestemming>

Antilliaans Dagblad. (2021, September 26). *Chata: Hervorming CTB noodzakelijk*. *Antilliaans Dagblad*.

Curaçao Tourist Board. (2024). *Business plan 2024: Building a resilient and sustainable tourism*. <https://www.curacaotouristboard.com/island-developments/master-plan/>

Curaçao Tourist Board. (2021). *The strategic tourism destination development plan 2022–2026*.

Curaçao Tourism Board. (2022). *Social Impact Report CTB 2021-2022*.

Dossier Koninkrijksrelaties. (2024, August 3). *Column – Overtoerisme*. Dossier Koninkrijksrelaties. <https://dossierkoninkrijksrelaties.nl/2024/08/03/column-overtoerisme/>

Dossier Koninkrijksrelaties. (2021, June 25). *Curaçao moet hoogste prioriteit geven aan verlaging overheidsuitgaven*. Dossier Koninkrijksrelaties. <https://dossierkoninkrijksrelaties.nl/2021/06/25/curacao-moet-hoogste-prioriteit-geven-aan-verlaging-overheidsuitgaven/>

Drayer, D. (2025, June 9). *Kabinet Pisas III presenteert regeerprogramma 2025–2029*. Curaçao.nu. <https://www.curacao.nu/nieuws/politiek-bestuur/53243/kabinet-pisas-iii-presenteert-regeerprogramma-2025-2029>

- Drayer, D. (2025, May 12). Internationale reisadviseurs enthousiast over Curaçao. Curaçao.nu.
- Drayer, D. (2025, April 29). Curaçao en Spanje willen nieuwe hotelketen op het eiland. Curaçao.nu.
- Drayer, D. (2025, April 5). *Zakito-lagune wordt schoongemaakt voor toerisme*. Curaçao.nu. <https://curacao.nu/en/zakito-lagune-wordt-schoongemaakt-voor-toerisme/>
- Drayer, D. (2020, April 16). *Op Curaçao dreigen 50.000 mensen door armoedegrens te zakken*. NOS Nieuws. <https://nos.nl/artikel/2330725-op-curacao-dreigen-50-000-mensen-door-armoedegrens-te-zakken>
- Drayer, D. (2020, April 3). *Honger en veiligheid worden de volgende problemen op Curaçao* <https://nos.nl/artikel/2329313-honger-en-veiligheid-woorden-de-volgende-problemen-op-curacao>
- Drayer, D. (2020, September 14). *Armoede op Curaçao steeds zichtbaarder*. Curaçao.nu.
- Government of Curaçao, Ministry of Economic Development. (2015). *Building on strengths: National development plan Curaçao 2015–2030*.
- Hendriksen, K. (2024, November 25). *Curaçao op een kruispunt: De oproep voor duurzaam toerisme en ontwikkeling*. Caribisch Netwerk.
- Koopman, D. (2025, 18 March). *Arme wijken op Curaçao blijven jaar in, jaar uit in de problemen: Ser'i Papaya (1)*. Caribisch Netwerk. <https://caribischnetwerk.ntr.nl/2025/03/18/arme-wijken-op-curacao-blijven-jaar-in-jaar-uit-in-de-problemen-seri-papaya-1/>
- Koopman, D. (2025, 28 May). *Arme wijken op Curaçao blijven jaar in, jaar uit in de problemen: Koraal Specht (2)*. Caribisch Netwerk. <https://caribischnetwerk.ntr.nl/2025/05/28/arme-wijken-op-curacao-blijven-jaar-in-jaar-uit-in-de-problemen-koraal-specht-2/>
- Mak, M. (2025, June 2). *Analyse: Lagere inkomens profiteren weinig van economische groei Curaçao*. Dossier Koninkrijksrelaties. <https://dossierkoninkrijksrelaties.nl/2025/06/02/analyse-lagere-inkomens-profileren-weinig-van-economische-groei-curacao/>
- NOS. (2020, June 25). *Onrust op Curaçao zal ook hier gevolgen hebben*. <https://nos.nl/artikel/2338759-onrust-op-curacao-zal-ook-hier-gevolgen-hebben>
- NOS. (2020, June 25). *'De pot is leeg, helpt Curaçaoënaars afhankelijk van voedselhulp'*.

<https://nos.nl/artikel/2338456-de-pot-is-leeg-helpt-curacaoenaars-afhankelijk-van-voedselhulp>

Overheid van Curaçao. (2022). *Regeerprogramma 2022–2025: Op weg naar herstel en een betere kwaliteit van leven voor het volk* [PDF]. <https://gobiernu.cw/wp-content/uploads/2022/04/Regeerprogramma-2022-2025-Gobiernu-di-Korsou.pdf>

Overheid van Curaçao. (2017). *Regeerprogramma 2017–2021: Ontplooiën van Curaçao's potentieel*.

Putters, K. (2025, March 5). *Navigeren op het smalle pad naar brede welvaart: een maatschappelijke transitie*. Sociaal-Economische Raad. <https://www.ser.nl/nl/actueel/toespraken/brede-welvaart-curacao>

Samson, J. (2016, Februari 26). *ABC-eilanden niet blij met immigranten en toeristen*. Caribisch Netwerk. <https://caribischnetwerk.ntr.nl/2016/02/26/abc-eilanden-niet-blij-met-immigranten-en-toeristen/>

Schakel, M. (2025, June 9). *Toeristen betalen straks 'entry fee' in plaats van 7% logeertax*. Curaçao.nu.

Stokkermans, P. (2024, November 1). *Opinie: Waar gaan we heen met ons toerisme?* Curaçao.nu. <https://curacao.nu/opinie-waar-gaan-we-heen-met-ons-toerisme/>

Van den Bergh, R. O. B. (2024, May 3). *Opinie: Toerismelessen voor Curaçao*. Antilliaans Dagblad. <https://antilliaansdagblad.com/nieuws-menu/curacao/opinie/29370-opinie-toerismelessen-voor-curacao>

## Secondary quantitative sources

Tourism Analytics. (2024, May 23). *Curaçao's tourism sector continues to show very positive figures for the first quarter of 2024*. Tourism Analytics. Retrieved August 26, 2025, from <https://tourismanalytics.com/blog-posts/curacaos-tourism-sector-continues-to-show-very-positive-figures-for-the-first-quarter-of-2024>

Trading Economics. (n.d.). *Curacao Manufacturing, Value Added (% of GDP)*. Retrieved [Date], from <https://tradingeconomics.com/curacao/manufacturing-value-added-percent-of-gdp-wb-data.html>

UNESCO. (2025). *Curaçao: Country profile – Global AI Ethics and Governance Observatory*. Retrieved from <https://www.unesco.org/ethics-ai/en/curacao>

World Bank. (n.d.). *Curaçao*. Retrieved August 26, 2025, from <https://data.worldbank.org/country/curacao>

World Bank. (n.d.). *International tourism, receipts (% of total exports) – Curaçao (Indicator ST.INT.RCPT.XP.ZS)*. Retrieved August 26, 2025, from <https://data.worldbank.org/indicator/ST.INT.RCPT.XP.ZS?locations=CW>

## **Appendix C: Interview guide**

### **Research objective**

The research objective is to understand how tourism dependence can be used as an opportunity for transformation to an alternative stable state. In other words, how tourism can be used to empower residents in tourism dependent destinations and alleviate poverty. The interviewee should help to gain insights in the barriers and enablers of tourism, how tourism has shaped Curaçao, and how the role of tourism in transformation. Furthermore, the interviewee can share their thoughts on how tourism has changed it over the years. They can share their thoughts on what tourism should look like in order to transform to a desirable stable state as well.

### **Key themes**

The themes are based on the literature review and the nature of the subquestion;

- Tourism dependence
- Challenges and advantages of tourism
- Transformation of Curaçao
- Barriers and enablers of transformation
- Alternative scenarios

### **Introduction**

Hello, and thank you for being willing to participate in this interview.

I am using these interviews to study how tourism dependent communities can use this dependence for transformation of their communities and environment. This includes thinking about future development of these communities with tourism dependence.

What I want to understand is how tourism dependence can be used as an opportunity for transformation to an alternative stable state. In other words, how tourism can be used to empower residents and alleviate poverty.

Your insights are extremely valuable. There are no right or wrong answers as I am interested in your personal experiences, perceptions, and ideas. With your permission, I'd like to record this interview so I can accurately capture what you say. The recording will be kept confidential and used only for research purposes.

You can stop the interview at any time or skip any question you don't feel comfortable answering.

Do you have any questions before we begin?

### **Background information**

The first questions serve as a background to explain your connection to the topic and how your insights will help this study.

1. Can you tell me a bit about yourself and your connection to this topic?

(Probe: How long have you lived and or worked in Curaçao?)

2. How would you describe the island and this community to someone who's never been here?

### **1. Tourism dependence**

3. What role does tourism play in the local economy and daily life?

(Probe: Can you explain how the community respond to this role?)

4. Can you describe how the community of Curaçao depends on tourism?

(Probe: How does tourism affect the community?)

5. Could you describe how tourism has affected the island?

(Probe: How has tourism contributed to Curaçao?)

(Probe: How do these aspects weigh up against each other?)

## **2. Challenges and advantages of tourism**

6. Has the attitude from resident toward tourism changed on the island?

(Probe: if so, how?)

7. Are there points where the expansion of tourism begins to hinder rather than help daily life for citizens?

(Probe: If so, what are they?)

8. Do you feel that tourism has improved the quality of life for its residents overall, or has it introduced more challenges?

(Probe: Does it create opportunities evenly for all residents?)

(Probe: What role does tourism play in income inequality on Curaçao?)

## **3. Transformation of Curaçao**

9. At what point did you notice a shift toward tourism on Curaçao?

(Probe: How do you feel about this development?)

(Probe: Can you describe how the island changed after this point?)

10. What factors currently make the tourism sector a dominant economic driver on the island?

11. In what ways could tourism dependence be used for broader transformation?

(Probe: For example, could it help build skills for residents, or increase investments in other sectors?)

12. Are there any efforts to rethink tourism dependence or the tourism sector? For example, initiatives to reduce tourism?

(Probe: What changes have been made or proposed?)

(Probe: How were these changes driven?)

## **4. Barriers and enablers for transformation**

13. What do you think are the biggest challenges for transforming the local economy away from tourism dependence?

(Probe: What do you think have been the barriers for transformation away from tourism?)

(Probe: How have these barriers come into place?)

14. What are the external pressures that might influence Curaçao's transformation away from tourism dependence?

15. Who do you think should be at the forefront of this transformation?

(Probe: How should this transformation take place?) For example, through policies?

## **5. Alternative scenarios**

16. What steps can the government and private sector take to reduce Curaçao's over-reliance on tourism as the main economic driver?

(Probe: What role do you think the government plays in seeking alternatives to the tourism model?)

17. What role should residents, local businesses, and government play in shifting the balance of tourism toward a sustainable model that prioritizes their welfare?

(Probe: What would a more sustainable or resilient community look like to you?)

18. How can the tourism sector contribute to improving socio economic stability and the standard of living for residents?

(Probe: What can they do to create more socio economic stability?)

## **6. Closing questions**

19. Is there anything else that you would like to add that we have not covered in this interview?

20. Would you be interested in receiving a summary of the research results once the study is complete?

## **Wrap up**

Thank you for your time and for your responses. Your input will be an important part of understanding how tourism dependence shapes communities and how those communities can change.

If you have any questions later or if you wish to withdraw your responses, please feel free to contact me. Thank you again for your participation!

## Dutch version

### Onderzoeksdoel

Het doel van dit onderzoek is om te begrijpen hoe toerisme-afhankelijkheid kan worden benut als een kans voor transformatie naar een alternatieve stabiele toestand. Met andere woorden: hoe toerisme kan worden ingezet om bewoners in toerisme-afhankelijke bestemmingen te versterken en armoede te verlichten. De geïnterviewde kan inzichten geven in de belemmeringen en mogelijkheden van toerisme, hoe toerisme Curaçao heeft gevormd, en welke rol toerisme speelt in de transformatie. Daarnaast kan de geïnterviewde zijn of haar visie delen over hoe het toerisme door de jaren heen is veranderd, en hoe toerisme eruit zou moeten zien om bij te dragen aan een wenselijke stabiele toestand.

### Belangrijke thema's

De thema's zijn gebaseerd op de literatuurstudie en de aard van de deelvraag:

- Toerisme-afhankelijkheid
- Uitdagingen en voordelen van toerisme
- Transformatie van Curaçao
- Belemmeringen en mogelijkheden voor transformatie
- Alternatieve scenario's

### Introductie

Hallo, en bedankt dat u bereid bent deel te nemen aan dit interview.

Ik gebruik deze interviews om te onderzoeken hoe gemeenschappen, die afhankelijk zijn van toerisme, deze afhankelijkheid kunnen gebruiken voor de transformatie van hun gemeenschap en leefomgeving. Dit omvat nadenken over de toekomstige ontwikkeling van deze gemeenschappen met betrekking tot toerisme-afhankelijkheid.

Wat ik wil begrijpen is hoe toerisme-afhankelijkheid benut kan worden als een kans voor transformatie naar een alternatieve stabiele toestand. Met andere woorden: hoe toerisme ingezet kan worden om bewoners te versterken.

Uw inzichten zijn van grote waarde. Er zijn geen goede of foute antwoorden – ik ben geïnteresseerd in uw persoonlijke ervaringen, waarnemingen en ideeën. Met uw toestemming wil ik dit interview opnemen, zodat ik uw woorden nauwkeurig kan vastleggen. De opname blijft vertrouwelijk en wordt uitsluitend voor onderzoeksdoeleinden gebruikt.

U kunt op elk moment stoppen met het interview of een vraag overslaan als u zich daar niet prettig bij voelt.

Heeft u nog vragen voordat we beginnen?

### Achtergrondinformatie

De eerste vragen zijn bedoeld om uw relatie met het onderwerp te begrijpen en hoe uw inzichten het onderzoek kunnen helpen.

1. Kunt u iets over uzelf vertellen en uw connectie met dit onderwerp?  
(Aanvullende vraag: Hoe lang woont of werkt u al op Curaçao?)
2. Hoe zou u het eiland en deze gemeenschap beschrijven aan iemand die hier nog nooit is geweest?

## 1. Toerisme-afhankelijkheid

3. Welke rol speelt toerisme in de lokale economie en het dagelijks leven?  
*(Aanvullende vraag: Hoe reageert de gemeenschap op deze rol?)*
4. Kunt u beschrijven hoe de gemeenschap van Curaçao afhankelijk is van toerisme?  
*(Aanvullende vraag: Hoe beïnvloedt toerisme de gemeenschap?)*
5. Kunt u beschrijven hoe toerisme het eiland heeft beïnvloed?  
*(Aanvullende vragen: Hoe heeft toerisme bijgedragen aan Curaçao? Hoe verhouden deze aspecten zich tot elkaar?)*

## 2. Uitdagingen en voordelen van toerisme

6. Is de houding van bewoners ten opzichte van toerisme op het eiland veranderd?  
*(Aanvullende vraag: Zo ja, hoe?)*
7. Zijn er punten waarop de uitbreiding van het toerisme het dagelijks leven van burgers belemmert in plaats van helpt?  
*(Aanvullende vraag: Zo ja, welke?)*
8. Vindt u dat toerisme de levenskwaliteit van bewoners in het algemeen heeft verbeterd, of heeft het juist meer uitdagingen gebracht?  
*(Aanvullende vragen: Creëert het gelijke kansen voor alle bewoners? Welke rol speelt toerisme in inkomensongelijkheid op Curaçao?)*

## 3. Transformatie van Curaçao

9. Op welk moment merkte u een verschuiving richting toerisme op Curaçao?  
*(Aanvullende vragen: Wat vindt u van deze ontwikkeling? Hoe is het eiland veranderd sinds dat moment?)*
10. Welke factoren maken het toerisme momenteel tot een dominante economische sector op het eiland?
11. Op welke manieren zou toerisme-afhankelijkheid kunnen worden ingezet voor bredere transformatie?  
*(Aanvullende vraag: Kan het bijvoorbeeld helpen bij het ontwikkelen van vaardigheden of investeringen in andere sectoren?)*
12. Zijn er initiatieven om de toerisme-afhankelijkheid of de sector zelf te herzien? Bijvoorbeeld pogingen om toerisme te verminderen?  
*(Aanvullende vragen: Welke veranderingen zijn voorgesteld of doorgevoerd? Wat was de drijvende kracht achter deze veranderingen?)*

## 4. Belemmeringen en mogelijkheden voor transformatie

13. Wat zijn volgens u de grootste uitdagingen bij het transformeren van de lokale economie weg van toerisme-afhankelijkheid?  
*(Aanvullende vragen: Wat zijn de barrières geweest voor transformatie? Hoe zijn deze belemmeringen ontstaan?)*
14. Welke externe invloeden kunnen de transformatie van Curaçao weg van toerisme beïnvloeden?

15. Wie zou volgens u een leidende rol moeten spelen in deze transformatie?  
(Aanvullende vraag: Hoe zou deze transformatie moeten plaatsvinden? Bijvoorbeeld via beleid?)

## 5. Alternatieve scenario's

16. Welke stappen kunnen de overheid en de private sector nemen om de overmatige afhankelijkheid van toerisme op Curaçao te verminderen?  
(Aanvullende vraag: Welke rol speelt de overheid in het zoeken naar alternatieven voor het toerismemodel?)
17. Welke rol zouden bewoners, lokale bedrijven en de overheid moeten spelen bij het verschuiven naar een duurzamer toerismemodel dat hun welzijn vooropstelt?  
(Aanvullende vraag: Hoe ziet een duurzamere of veerkrachtigere gemeenschap er volgens u uit?)
18. Hoe kan de toerismesector bijdragen aan verbetering van sociaaleconomische stabiliteit en de levensstandaard van bewoners?  
(Aanvullende vraag: Wat kan de sector doen om meer sociaaleconomische stabiliteit te creëren?)

## 6. Afsluitende vragen

19. Is er nog iets wat u graag zou willen toevoegen dat we niet hebben besproken in dit interview?
20. Zou u geïnteresseerd zijn in het ontvangen van een samenvatting van de onderzoeksresultaten zodra de studie is afgerond?

## Afronding

Bedankt voor uw tijd en uw antwoorden. Uw bijdrage is een belangrijk onderdeel om te begrijpen hoe toerisme-afhankelijkheid gemeenschappen vormt en hoe deze gemeenschappen kunnen veranderen.

Mocht u later nog vragen hebben of uw antwoorden willen intrekken, neem dan gerust contact met mij op.

Nogmaals bedankt voor uw deelname!

## Appendix D: Codebook

Theme	Subtheme	Definition	Inclusion criteria	Exclusion criteria
The current stable state	Economic vulnerability of communities	This code represents the economic vulnerability of the communities on Curaçao. It includes the extent to which communities are at risk of economic instability due to internal and external factors. For example, due to a one pillar economy, unemployment, or income insecurity.	<ul style="list-style-type: none"> <li>References to communities' dependence on specific industries for income</li> <li>Descriptions of risks or challenges to livelihoods (e.g., job loss, unstable markets)</li> <li>Statements about lack of economic diversification or over-reliance on tourism</li> <li>Evidence of poverty, inequality, or lack of access to resources and services</li> <li>Impact of external shocks (e.g., pandemics, natural disasters, global economic changes) on local incomes</li> </ul>	<ul style="list-style-type: none"> <li>General national-level economic issues without direct link to community-level effects</li> <li>Personal financial struggles unless tied to broader community trends</li> <li>Discussions of social or cultural vulnerability without an economic dimension</li> <li>Technical descriptions of economic performance without reference to risks or vulnerabilities</li> </ul>
The current stable state	Economic vulnerability of individuals and households	This code represents the individual and household level of economic instability. It includes the extent to which individuals or households are at risk of economic instability. For example, due to low income, unemployment, high costs of living, or limited access to essential goods and services.	<ul style="list-style-type: none"> <li>Mentions of job loss, underemployment, or insecure work affecting individuals or families</li> <li>References to difficulties meeting basic needs (e.g., food, housing, healthcare)</li> <li>Statements about financial strain due to rising prices, debt, or unexpected expenses</li> <li>Descriptions of households relying heavily on a single income source or informal work</li> <li>Impact of economic crises, disasters, or pandemics on personal and household finances</li> <li>Examples of coping strategies used by individuals or families to manage financial risk</li> </ul>	<ul style="list-style-type: none"> <li>General discussions of community-wide or national-level vulnerability without reference to individuals or households</li> <li>Non-economic vulnerabilities (e.g., social exclusion, lack of political voice) unless tied to financial hardship</li> <li>Purely statistical or factual economic indicators without a link to lived experiences</li> <li>Business or corporate-level financial vulnerability</li> </ul>
The current stable state	Employment	This code represents the employment and unemployment in Curaçao. It includes references to the availability, quality and stability of employment. Additionally, it includes employment across different sectors.	<ul style="list-style-type: none"> <li>Mentions of job creation, job loss, or employment trends in specific sectors</li> <li>Discussions of working conditions, wages, or benefits</li> <li>References to full-time, part-time, seasonal, or informal work arrangements</li> <li>Skills or training requirements linked to employability</li> <li>Impact of economic shifts, crises, or disasters on job availability or stability</li> </ul>	<ul style="list-style-type: none"> <li>General economic discussions without a direct link to jobs or the labor market</li> <li>Unpaid work (e.g., volunteering, household labor) unless framed as part of employment trends or opportunities</li> <li>Education or training unless directly tied to employment outcomes</li> <li>Discussions solely about income without mention of work or job-related aspects</li> </ul>
The current stable state	Income inequality	This code represents the income inequality experienced by residents in Curaçao. It demonstrates the uneven distribution of income, which can lead to differences in standards of living, limited access to resources and economic opportunities.	<ul style="list-style-type: none"> <li>References to income gaps between different social, ethnic, or regional groups</li> <li>Statements about unequal access to well-paying jobs or economic opportunities</li> <li>Discussions of wage disparities between industries (e.g., tourism vs. other sectors)</li> <li>References to poverty existing alongside wealth within the same community</li> <li>Mentions of the social or economic consequences of income disparity (e.g., reduced access to education, healthcare, or housing)</li> </ul>	<ul style="list-style-type: none"> <li>General mentions of poverty without comparison to higher-income groups</li> <li>Discussions of economic vulnerability without explicit reference to unequal distribution</li> <li>National-level economic statistics that don't connect to income disparities between groups</li> <li>References to inequality in non-economic areas (e.g., gender, political power) unless linked to income differences</li> </ul>
The current stable state	Education	This code represents the formal and informal education on Curaçao. It includes references of access to education, the dropping out of education, and the role of education in social and economic development.	<ul style="list-style-type: none"> <li>Discussions of access to education (e.g., barriers, affordability, location)</li> <li>References to quality of teaching, resources, or facilities</li> <li>Education's role in reducing vulnerability or building resilience</li> <li>Mentions of educational inequalities (e.g., between regions or socio-economic groups)</li> </ul>	<ul style="list-style-type: none"> <li>General mentions of "training" or "capacity building" unrelated to formal or structured education</li> <li>Discussions of knowledge, skills, or awareness unless directly linked to an educational context</li> <li>References to education outside of Curaçao unless directly compared to the local context</li> <li>Informal learning experiences that are not framed as part of an educational system or initiative</li> </ul>
Tourism's influence on the current stable state	Tourism sector	This code represents the overall role of tourism in the economy; References to the tourism sector in Curaçao, this includes its structure, stakeholders, activities, and its role within the local economy and society. Additionally, it includes tourism related businesses, services, employment, and infrastructure.	<ul style="list-style-type: none"> <li>Mentions of hotels, tour operators, attractions, or hospitality services</li> <li>Discussions about tourism-related employment and workforce</li> <li>References to tourism infrastructure</li> <li>Policies, regulations, or initiatives aimed at the tourism industry</li> <li>Economic data or impacts specific to the tourism sector</li> <li>Stakeholders involved in tourism, such as government agencies, private sector, and communities</li> </ul>	<ul style="list-style-type: none"> <li>General economic or social topics without a clear tourism link</li> <li>Tourism as a cultural or environmental phenomenon unless directly related to the sector's organization or economy</li> <li>Discussions focused solely on visitors' experiences or perceptions unless tied to the industry structure</li> <li>Other economic sectors mentioned in passing without direct relation to tourism</li> </ul>

Theme	Subtheme	Definition	Inclusion criteria	Exclusion criteria
<b>Tourism's influence on the current stable state</b>	<b>Tourism development</b>	This code represents the changes in tourism infrastructure and capacity; it includes processes, plans, and activities that aim to develop the tourism industry in Curaçao further. For example, improvements in infrastructure, marketing strategies, investment initiatives, and efforts to improve the tourism product.	<ul style="list-style-type: none"> <li>References to building new hotels, resorts, attractions, or tourism facilities</li> <li>Discussions of government or private sector plans to grow or change the tourism industry</li> <li>Mentions of marketing campaigns or efforts to attract new tourist markets. <ul style="list-style-type: none"> <li>Mentions of promotions and initiatives to market Curaçao as a tourism destination.</li> </ul> </li> <li>Investments aimed at enhancing tourism services or infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>General tourism sector discussions without reference to development or growth</li> <li>Tourism impacts not related to development efforts (e.g., environmental damage)</li> <li>Visitor experiences or perceptions unrelated to development initiatives</li> <li>Economic diversification unless explicitly linked to tourism development</li> </ul>
<b>Tourism's influence on the current stable state</b>	<b>Economic growth</b>	This code represents the overall economic growth of Curaçao. The increase in the overall economic output and wealth of Curaçao, often measured by indicators such as GDP, employment rates, business expansion, or improvements in living standards. It includes economic trends, investments and development initiatives. Additionally, it includes examples of stagnated economic growth.	<ul style="list-style-type: none"> <li>References to rising economic indicators (e.g., GDP growth, increased exports)</li> <li>Statements about expanding industries or business opportunities</li> <li>Discussions of investments, infrastructure development, or new projects</li> <li>Positive changes in employment or income levels linked to economic growth</li> <li>Policy measures aimed at stimulating growth</li> </ul>	<ul style="list-style-type: none"> <li>General economic conditions without clear mention of growth or increase</li> <li>Economic diversification unless linked explicitly to growth</li> <li>Discussions of economic vulnerability or decline</li> <li>Social or environmental impacts of economic activity unless connected to growth</li> </ul>
<b>Resilience</b>	<b>Non-transformative resilience</b>	This code represents a type of resilience where, following a disturbance or shock, the system returns to its original stable state without undergoing fundamental changes or improvements. The system essentially maintains the status quo, showing no significant adaptation or transformation despite challenges.	<ul style="list-style-type: none"> <li>Examples where the system or community experiences shocks but rebounds to the pre-shock state</li> <li>References to no meaningful changes occurring after events like protests or crises</li> <li>Descriptions of recovery that simply restore the previous conditions without innovation or reform</li> <li>Statements indicating a return to everyday routines without addressing underlying issues</li> <li>Evidence of resilience framed as "business as usual" rather than adaptive change</li> </ul>	<ul style="list-style-type: none"> <li>Instances where transformation, adaptation, or significant change occurs post-shock</li> <li>Discussions of resilience involving learning, innovation, or system improvement</li> <li>Descriptions of vulnerability or failure to recover</li> <li>Situations where the system shifts to a new stable state or improves its capacity</li> </ul>
<b>Resilience</b>	<b>Bounce backward resilience</b>	This code represents a type of resilience where, following a disturbance or shock, the system transitions to a less desirable or weakened stable state. Instead of recovering or improving, the system deteriorates or becomes more vulnerable, sometimes resulting in negative transformations such as population decline or economic imbalance.	<ul style="list-style-type: none"> <li>Examples where the system's recovery leads to a worse or less stable state than before</li> <li>References to negative transformations, such as population out-migration or increased economic dependency</li> <li>Descriptions of failed resilience where shocks cause long-term decline or instability</li> <li>Evidence of socio-economic shifts that reduce community well-being or capacity</li> <li>Statements showing increased vulnerability or diminished local resources post-shock</li> </ul>	<ul style="list-style-type: none"> <li>Cases where the system returns to the original stable state without deterioration</li> <li>Positive or transformative resilience leading to improved conditions</li> <li>Temporary setbacks followed by full recovery</li> <li>Situations without clear evidence of negative long-term change</li> </ul>
<b>Resilience</b>	<b>Bounce forward resilience</b>	This code represents a type of resilience characterized by a system's ability to not only recover from shocks but also to transform into a more adaptive, improved, or fundamentally changed state. This involves critical reflection on existing conditions and actions that challenge the status quo, potentially leading to more sustainable or equitable outcomes.	<ul style="list-style-type: none"> <li>Expressions of growing criticism or resistance toward tourism and its impacts</li> <li>Instances of protests, activism, or social movements that result in or aim for systemic change</li> <li>Descriptions of community actions that reject or modify previous practices to foster improvement</li> <li>Evidence of learning, adaptation, or innovation following disturbances</li> </ul>	<ul style="list-style-type: none"> <li>Recovery that simply restores the previous stable state without change</li> <li>Negative transformations leading to worse conditions</li> <li>Temporary disruptions without lasting change or reflection</li> <li>Passive acceptance of conditions without critical engagement</li> </ul>
<b>Perceptions influencing resilience</b>	<b>Perception of tourism</b>	This code represents the opinions, attitudes, beliefs, and feelings of individuals and communities regarding tourism in Curaçao. To exemplify, the perceived benefits, the challenges, cultural impacts, economic significance, and social impacts of tourism.	<ul style="list-style-type: none"> <li>Expressions of positive or negative views about tourism</li> <li>Opinions on tourism's impact on local culture, economy, or environment</li> <li>Discussions about how tourism affects community well-being or identity</li> <li>Stakeholder perspectives on tourism development or management</li> <li>Narratives describing experiences or expectations related to tourism</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder perspectives on tourism development or management</li> <li>Objective descriptions of tourism statistics or policies without evaluative statements</li> <li>General economic or social issues unrelated to attitudes about tourism</li> <li>Visitor or tourist perceptions unless clearly linked to local community views</li> <li>Discussions of tourism infrastructure or employment without perception elements</li> </ul>
<b>Perceptions influencing resilience</b>	<b>Perceived impact of tourism development</b>	This code represents the opinions, attitudes, beliefs, and feelings of individuals and communities regarding the positive and negative effects of tourism development in Curaçao. It includes the economic, social, and cultural impacts.	<ul style="list-style-type: none"> <li>Statements expressing perceived benefits of tourism development</li> <li>Expressions of concerns or criticisms about negative consequences</li> <li>Community reflections on how tourism development has changed local life or landscapes</li> <li>Opinions on fairness, sustainability, or inclusiveness of tourism growth</li> <li>Discussions of social conflicts or cohesion related to tourism development</li> </ul>	<ul style="list-style-type: none"> <li>Objective descriptions of tourism development without perception or opinion</li> <li>General tourism impacts unrelated to development processes</li> <li>Visitor or tourist perspectives unless explicitly tied to community perceptions</li> <li>Economic or environmental data without evaluative comments</li> </ul>

Theme	Subtheme	Definition	Inclusion criteria	Exclusion criteria
<b>Perceptions influencing resilience</b>	<b>Trust in government</b>	This code represents the confidence and perception that individuals in Curaçao may have on the government. This includes the government's ability for managing resources and implementing policies.	<ul style="list-style-type: none"> <li>Statements from residents, organizations, or stakeholders about their confidence in government actions or policies</li> <li>Opinions regarding the government's effectiveness, integrity, or transparency</li> <li>Evidence of community support or skepticism toward government initiatives</li> <li>Links between trust and ability to implement changes or respond to shocks</li> <li>Perceptions of government credibility in tourism management, economic policy, or resilience-building</li> </ul>	<ul style="list-style-type: none"> <li>General criticism of government unrelated to trust or confidence</li> <li>Trust in non-governmental actors (e.g., private sector, NGOs)</li> <li>Hypothetical trust without reference to actual community perceptions</li> <li>Discussions about government capacity or policy effectiveness that do not involve public perception</li> </ul>
<b>Capacity to deal with disturbances</b>	<b>Government awareness</b>	This code represents the degree to which the government, and related institutions recognize and acknowledge challenges, risks, or perturbations within Curaçao. It includes awareness of social and economic challenges.	<ul style="list-style-type: none"> <li>Statements indicating the government's recognition of a problem or trend</li> <li>References to official reports, policies, or speeches showing acknowledgment of specific issues</li> <li>Evidence that government decisions are informed by data, research, or public feedback</li> <li>Mentions of the government being aware of risks such as tourism dependence, economic vulnerability, or environmental change</li> </ul>	<ul style="list-style-type: none"> <li>General mentions of government activity without reference to awareness or recognition</li> <li>Criticism or praise of government performance that does not address whether they know about the issue</li> <li>Assumptions about government knowledge without supporting evidence</li> <li>International awareness or recognition unless linked to local governmental understanding</li> </ul>
<b>Capacity to deal with disturbances</b>	<b>Governmental capacity</b>	This code represents the ability and capacity of the government to deal with perturbations. It includes preparing for them, responding, managing, and recovering from perturbations through policies, resources, coordination, and governance.	<ul style="list-style-type: none"> <li>References to government planning and response to deal with tourism related disturbances.</li> <li>Descriptions of institutional resources, infrastructure, and personnel capacity</li> <li>Examples of policy development, implementation, or enforcement related to resilience</li> <li>Evidence of inter-agency coordination and communication during disturbances</li> <li>Mentions of government-led capacity-building or community support programs</li> </ul>	<ul style="list-style-type: none"> <li>Individual government officials' skills without institutional context</li> <li>Non-governmental or community capacities unless clearly linked to government support</li> <li>General political discussions not related to disturbance management</li> <li>Economic or social policies unrelated to resilience or crisis response</li> </ul>
<b>Capacity to deal with disturbances</b>	<b>Community capacity</b>	This code represents the ability and capacity of the community to deal with perturbations. It includes effectively responding to them, managing, and recovering from perturbations, using local resources, skills, and knowledge.	<ul style="list-style-type: none"> <li>Examples of community collaboration, leadership, and social cohesion during crises</li> <li>Evidence of community-driven problem-solving or adaptive initiatives</li> <li>References to local knowledge, skills, and resources mobilized in response to disturbances</li> <li>Mentions of empowerment, capacity-building, or training aimed at improving resilience</li> </ul>	<ul style="list-style-type: none"> <li>Individual capacities unrelated to collective community action</li> <li>External or government capacity unless clearly supporting community efforts</li> <li>Generic social issues without direct relation to coping with disturbances</li> </ul>
<b>Capacity to deal with disturbances</b>	<b>Economic diversification</b>	This code represent the degree of economic diversification in Curaçao and how it can mitigate perturbations caused by tourism dependence. It includes the range of economic activities and industries in Curaçao to help increase capacity to deal with disturbances on the island.	<ul style="list-style-type: none"> <li>References to efforts or plans to develop industries other than tourism</li> <li>Discussions of the benefits of having multiple economic sectors to reduce risk</li> <li>Descriptions of challenges or barriers to economic diversification</li> <li>Statements highlighting the importance of diversification for resilience and stability</li> </ul>	<ul style="list-style-type: none"> <li>General economic growth discussions without mentioning diversification</li> <li>Tourism promotion unless it specifically relates to diversification efforts (e.g., developing eco-tourism alongside mass tourism)</li> <li>Technological innovation or entrepreneurship unless directly tied to expanding economic sectors</li> <li>Discussions solely about economic vulnerability or dependence without reference to diversification</li> </ul>
<b>Perturbations</b>	<b>Economic vulnerability</b>	This code represents the economic vulnerability experienced by residents which can be traced back to tourism dependence. It includes examples of situations where residents of Curaçao are economically vulnerable and its linked to tourism dependence. Furthermore, it shows how fluctuations in tourism demand influence economic vulnerability.	<ul style="list-style-type: none"> <li>Statements explicitly connecting economic risks or instability to tourism dependence</li> <li>Examples of job loss, reduced income, or business closures caused by downturns in tourism</li> <li>Mentions of seasonal vulnerability due to tourism fluctuations</li> <li>Descriptions of communities or sectors that are financially exposed because of heavy reliance on tourism</li> <li>References to lack of diversification making the economy more vulnerable</li> </ul>	<ul style="list-style-type: none"> <li>General discussions of economic vulnerability without reference to tourists</li> <li>Mentions of tourism dependence without linking it to financial risk or instability</li> <li>Broader economic shocks that affect all sectors equally without singling out tourism's role</li> <li>Tourism-related environmental or cultural impacts that aren't tied to economic fragility</li> </ul>
<b>Perturbations</b>	<b>Access to public facilities</b>	This code represents the degree to which the general public has access to goods and services. For example, access to beaches, information, infrastructure and resources. Additionally, the feelings it can evoke where accessibility might be limited.	<ul style="list-style-type: none"> <li>references of access to natural resources (e.g., beaches, parks, coastal areas).</li> <li>references of access to public infrastructure (e.g., roads, public transport, utilities).</li> <li>references of social and cultural impact of tourism</li> <li>references and mentions of the experiences with tourism.</li> </ul>	<ul style="list-style-type: none"> <li>General accessibility issues unrelated to shocks or disturbances</li> <li>Private or restricted access without public implications</li> <li>Long-term infrastructure discussions without connection to crisis response</li> <li>Access related solely to economic or cultural activities not tied to shocks</li> </ul>

Theme	Subtheme	Definition	Inclusion criteria	Exclusion criteria
<b>Perturbations</b>	<b>Impact on infrastructure</b>	This code represents the impact tourism dependence and tourism have on the infrastructure on Curaçao, such as the physical structures and facilities, roads, and utilities.	<ul style="list-style-type: none"> <li>• Descriptions of changes to roads, airports, ports, or public transport due to tourism or development</li> <li>• References to strain, damage, or improvements in utilities like water, electricity, and sanitation</li> <li>• Discussions about the capacity or limitations of infrastructure to support economic or social activities</li> <li>• Examples of government or private sector investments in infrastructure related to tourism or economic growth</li> <li>• Statements about maintenance challenges or infrastructure resilience during shocks</li> </ul>	<ul style="list-style-type: none"> <li>• General economic or social impacts without specific reference to infrastructure</li> <li>• Environmental impacts unless directly affecting infrastructure</li> <li>• Individual buildings or private property unless part of broader infrastructure discussions</li> <li>• Infrastructure unrelated to tourism or economic activities unless linked to shocks or community capacity</li> </ul>
<b>Perturbations</b>	<b>Tourism led inflation</b>	This code represents the rise in prices of goods, services, and housing in Curaçao driven by increased demand and economic activity related to the tourism industry, often leading to higher living costs for local residents.	<ul style="list-style-type: none"> <li>• References to price increases linked to tourism demand (e.g., food, housing, transport)</li> <li>• Discussions about cost of living changes attributed to tourism growth</li> <li>• Examples of inflationary pressure affecting local households or businesses due to tourism</li> <li>• Statements highlighting economic challenges caused by tourism-driven inflation</li> <li>• Mention of government or community concerns over affordability related to tourism</li> </ul>	<ul style="list-style-type: none"> <li>• General inflation without connection to tourism</li> <li>• Economic issues unrelated to price changes or cost of living</li> <li>• Tourism impacts unrelated to economic or price effects</li> <li>• Discussions about wages or employment without reference to inflation</li> </ul>
<b>Trajectory</b>	<b>Trajectory</b>	This code represents the path, or events that occurred which lead the island to transform to a particular stable state. This includes historical developments, current trends, and future strategies influencing the socio-economic conditions of Curaçao.	<ul style="list-style-type: none"> <li>• Descriptions of historical or current developments leading to a stable state</li> <li>• Analysis of cause-and-effect relationships along the path of change</li> <li>• References to successes or failures in following a particular trajectory</li> <li>• Discussions of patterns, sequences, or directions in policy, tourism, or economic development</li> </ul>	<ul style="list-style-type: none"> <li>• General statements about outcomes without reference to the path taken</li> <li>• Speculative trajectories without grounding in actions or trends</li> <li>• Short-term events that do not influence long-term stability</li> <li>• Descriptions of isolated incidents unrelated to systemic change or stable states</li> </ul>
<b>Transformation</b>	<b>Barriers to transformation</b>	This code represents the barriers or obstacles which limit the ability to transform to an alternative stable state. This includes political, economic, and social barriers that exist.	<ul style="list-style-type: none"> <li>• Mentions of international pressure that discourages transformation</li> <li>• References to financial incentives or vested interests that reinforce tourism dependence</li> <li>• Political resistance or lack of political will to implement change</li> <li>• Social or cultural factors that make transformation difficult</li> <li>• Structural or institutional limitations</li> <li>• External economic dependencies</li> </ul>	<ul style="list-style-type: none"> <li>• General challenges unrelated to transformation</li> <li>• Day-to-day operational issues in tourism without broader systemic implications</li> <li>• Positive enablers of transformation</li> <li>• Changes caused solely by natural disasters or shocks without link to transformation barriers</li> </ul>
<b>Transformation</b>	<b>Government aiding transformation</b>	This code represents the role of the government in facilitating or implementing changes to transform to an alternative stable state. This includes policies, strategies, and regulations that support transformation.	<ul style="list-style-type: none"> <li>• Descriptions of government-led initiatives for tourism reform or economic diversification</li> <li>• References to policy adoption or legislative changes that aim to improve resilience or reduce tourism dependence</li> <li>• Statements recommending government action to drive transformation</li> <li>• Examples of governance interventions in infrastructure, education, environmental protection, or community development tied to systemic change</li> </ul>	<ul style="list-style-type: none"> <li>• General criticism or praise of government unrelated to transformation</li> <li>• Non-policy-related governance discussions</li> <li>• Changes led by communities, NGOs, or the private sector without government involvement</li> <li>• Resilience outcomes unless clearly linked to government transformation efforts</li> </ul>
<b>Transformation</b>	<b>Institutional support and policy response</b>	This code represents the role of governmental institutions and their policies supporting transformation to an alternative stable state. This includes formal actions, strategies, and resource allocations in favor of transformation.	<ul style="list-style-type: none"> <li>• Examples of institutional programs or funding aimed at influencing tourism dependence</li> <li>• References to organizational frameworks, partnerships, or coordination between institutions that affect transformation</li> <li>• Institutional capacity-building efforts that strengthen stability or enable change</li> </ul>	<ul style="list-style-type: none"> <li>• Individual political actions without institutional backing</li> <li>• Community-led initiatives without institutional involvement</li> <li>• General governance capacity unrelated to transformation or stable states</li> <li>• Vague statements about institutions without clear link to policy or transformation</li> </ul>
<b>Transformation</b>	<b>Tourism aiding transformation</b>	This code represents the strategies or policies that could be implemented to change the tourism sector in a way that would be more beneficial to the island. Thus changing to a different tourism model instead of focusing on mass tourism. This includes both planned and implemented actions aimed at enabling transformation, diversification, or systemic change.	<ul style="list-style-type: none"> <li>• References to government policies or programs promoting economic diversification away from tourism</li> <li>• Descriptions of reforms, investments, or initiatives aimed at transforming the tourism sector. • Statements about tourism's role in supporting livelihoods or local businesses</li> <li>• Mentions of planned transformations in governance, infrastructure, or community practices to reduce tourism reliance</li> <li>• Examples of strategies that facilitate shifts toward more sustainable or resilient economic models</li> </ul>	<ul style="list-style-type: none"> <li>• General tourism development without transformative intent</li> <li>• Minor changes that do not change the stable state</li> <li>• Changes caused solely by external shocks without deliberate action or policy</li> <li>• Discussions of resilience types unless tied directly to transformative actions or policies</li> </ul>

Theme	Subtheme	Definition	Inclusion criteria	Exclusion criteria
Capacity for transformation	Capacity of government	This code represents the capacity and ability of the government, or governmental institutions to implement policies, and guide transformations to an alternative stable state. For example, economic, financial, and legislative capacity for transformation.	<ul style="list-style-type: none"> <li>• Descriptions of governmental resources (budget, staff, infrastructure) that support policy implementation</li> <li>• Discussions of the government's ability to respond to shocks or disturbances</li> <li>• Statements linking government capacity to resilience, transformation, or adaptation</li> <li>• Examples of legislation, institutional structures, or programs that enable change</li> <li>• Analysis of strengths or weaknesses in government capacity affecting stability</li> </ul>	<ul style="list-style-type: none"> <li>• Capacity of other actors (e.g., community or tourism sector) unless directly connected to government support</li> <li>• General government presence or influence without reference to ability to act or transform</li> <li>• Hypothetical government capabilities not grounded in current conditions</li> <li>• Discussions about government impact without reference to capacity or resources</li> </ul>
Capacity for transformation	Capacity of tourism	This code represents the resources and abilities of the tourism sector that enable or inhibit transformation toward an alternative stable state. This includes, financial, human, and organizational capacities for transformation.	<ul style="list-style-type: none"> <li>• Descriptions of financial, human, or technical resources in the tourism sector</li> <li>• Discussions of organizational or institutional ability to implement changes</li> <li>• Examples of infrastructure or systems that enable or hinder transformation</li> <li>• Statements linking tourism sector capacity to resilience, adaptation, or diversification</li> <li>• References to current limitations or strengths in the sector that affect change</li> </ul>	<ul style="list-style-type: none"> <li>• General tourism development unrelated to capacity for transformation</li> <li>• Community or government capacity unless explicitly linked to tourism</li> <li>• Hypothetical capacity not based on current conditions</li> <li>• Discussions about tourism impact without reference to ability to change</li> </ul>
Competing stable states	Stable state A: High tourism dependence and low socio-economic stability	This code represents the potential alternative stable state, which depends on tourism as a primary economic pillar, together with low socio-economic stability. This includes economic vulnerability, low income, limited employment, brain drain, and inequality.	<ul style="list-style-type: none"> <li>• References to continued or increased tourism dependence without economic diversification.</li> <li>• Mentions of socio-economic challenges linked to tourism reliance</li> <li>• Resident perspectives that highlight vulnerabilities if tourism remains the dominant pillar.</li> <li>• Statements describing limited or negative community benefits from tourism development</li> <li>• Discussions of risks of mass tourism or uncontrolled development leading to instability</li> </ul>	<ul style="list-style-type: none"> <li>• General aspirations for sustainability, inclusivity, or balance (3Ps) without a clear link to high tourism dependence and low socio-economic stability</li> <li>• Barriers and limitations at the institutional, economic, or social level</li> <li>• Concrete policies or institutional actions</li> </ul>
Competing stable states	Stable state B: High tourism dependence and high socio-economic stability	This code represents a potential alternative stable state, with high tourism dependence and high socio-economic stability. This includes diversification of the tourism product, increased resident participation, and reinvestments of tourism generated revenue.	<ul style="list-style-type: none"> <li>• References to strategies that diversify the tourism product</li> <li>• Mentions of socio-economic improvements</li> <li>• References to residents' involvement or participation in tourism development</li> <li>• Discussions of balancing high tourism dependence with social equity and inclusivity.</li> </ul>	<ul style="list-style-type: none"> <li>• Descriptions of negative socio-economic outcomes of tourism growth</li> <li>• References to alternative economic activities or diversification outside of tourism</li> <li>• Mentions of tourism growth that undermines cultural identity, authenticity, or inclusivity</li> </ul>
Competing stable states	Stable state D: Low tourism dependence and high socio-economic stability	This code represents the potential alternative stable state, with low tourism dependence and high socio-economic stability, which includes: economic diversification, development of alternative industries, improved quality of life and sustainability.	<ul style="list-style-type: none"> <li>• Economic diversification strategies beyond tourism</li> <li>• Policies or visions explicitly aimed at reducing tourism dependence.</li> <li>• References to quality of life improvements that are tied to reduced tourism reliance.</li> <li>• Mentions of balancing the 3 P's (People, Planet, Profit) in relation to development strategies.</li> <li>• Critiques of the one-pillar economy as unsustainable</li> </ul>	<ul style="list-style-type: none"> <li>• Mentions of tourism diversification within tourism dependence</li> <li>• References to pro-tourism policies or expansion as a pathway for socio-economic stability.</li> <li>• References community-level tourism participation without links to broader economic diversification.</li> </ul>
The ideal stable state	The ideal stable state	This code represents references or descriptions of the ideal stable state, which includes decreased tourism dependence and increased socio-economic stability of Curaçao.	<ul style="list-style-type: none"> <li>• References to low tourism dependence as an ideal goal</li> <li>• Examples of countries or regions successfully maintaining a diversified economy with strong resilience</li> <li>• Descriptions of desired economic, social, or environmental characteristics for Curaçao's future</li> <li>• Statements about how to transform from the current state to the ideal state</li> <li>• Long-term visions, plans, or aspirations for sustainable development and resilience</li> </ul>	<ul style="list-style-type: none"> <li>• General mentions of economic diversification without linking to an ideal stable state</li> <li>• Criticism of the current state without a proposed vision or target state</li> <li>• Short-term tourism management strategies without transformation goals</li> <li>• Hypothetical stable states not described as desirable or aspirational</li> </ul>