



Island Innovation Policy Brief:

Exploring amplified Food Security vulnerabilities in Curacao, Aruba and Sint Maarten amidst the COVID-19 pandemic

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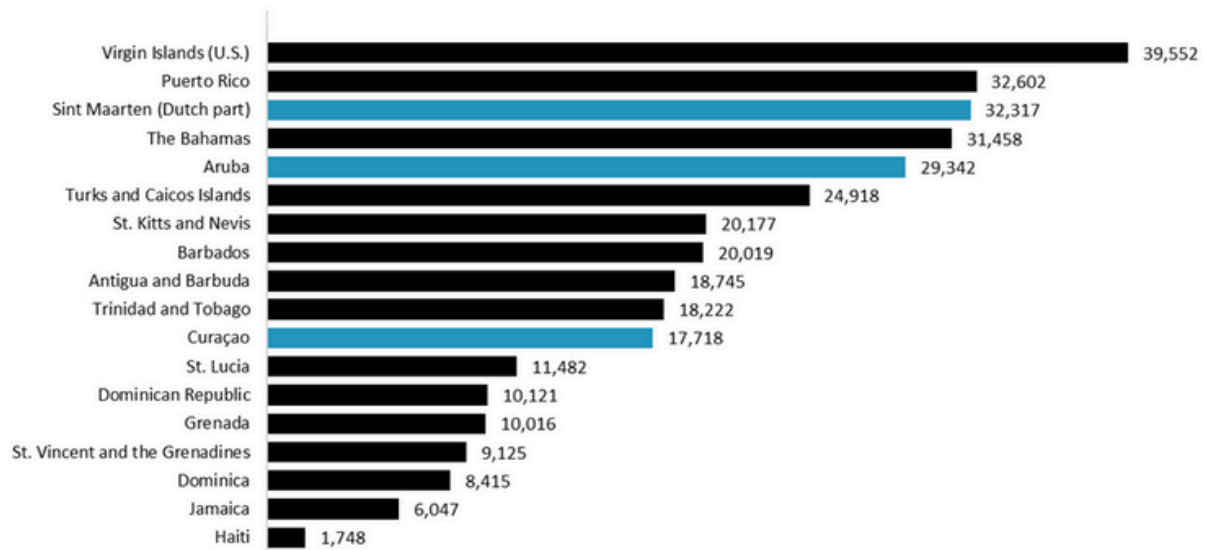
Introduction

In a recent study conducted by a consortium of researchers from the Universities of Aruba, Curaçao and St Martin, funded by the Dutch ZonMw Health and Medical Sciences agency, the critical issue of food security and economic diversification in the Dutch Caribbean territories of Curaçao, Aruba, and Sint Maarten (CAS islands) was brought to the forefront. The research focused on vulnerabilities in the food systems of these island communities, further intensified by the global health crisis stemming from the COVID-19 pandemic. The research partnered with the data collection by the World Food Programme in the Caribbean which increased potentials for Caribbean comparison. The data gathered through that partnership as well as through various research activities gathered as part of the ZonMw research project, are the building blocks for this study. This paper delves into the intricate web of factors influencing these vulnerabilities, ranging from economic conditions to environmental concerns. According to the researchers, "The onset of the COVID-19 pandemic has brought to light a profound challenge in the realm of food security, a quandary that might not have commanded significant attention within the research priorities of the CAS islands under ordinary circumstances. However, it also offers glimpses into prospective avenues for diversifying our Small Island Economies, presenting opportunities to fortify the islands' resilience in the face of future adversities."

The case for food security in Curaçao, Aruba and Sint Martin

The relative absence of food security as a focal point on policy agendas in Curaçao, Aruba and Sint Martin, the three island countries in the Caribbean part of the Kingdom of the Netherlands also known as the CAS islands, prior to the emergence of the COVID-19 crisis is a noteworthy observation. These islands, distinguished by their comparatively robust GDP per capita in relation to their Caribbean counterparts, have enjoyed economic prosperity since the first decades of the 20th Century. Consequently, issues related to food security may not have garnered significant attention, as they did not present immediate concerns. This underscores a pertinent aspect of the COVID-19 pandemic—its capacity to unveil previously overlooked vulnerabilities, even within seemingly affluent Small Island States (Chart 1).

Chart 1: GDP per capita (in USD)



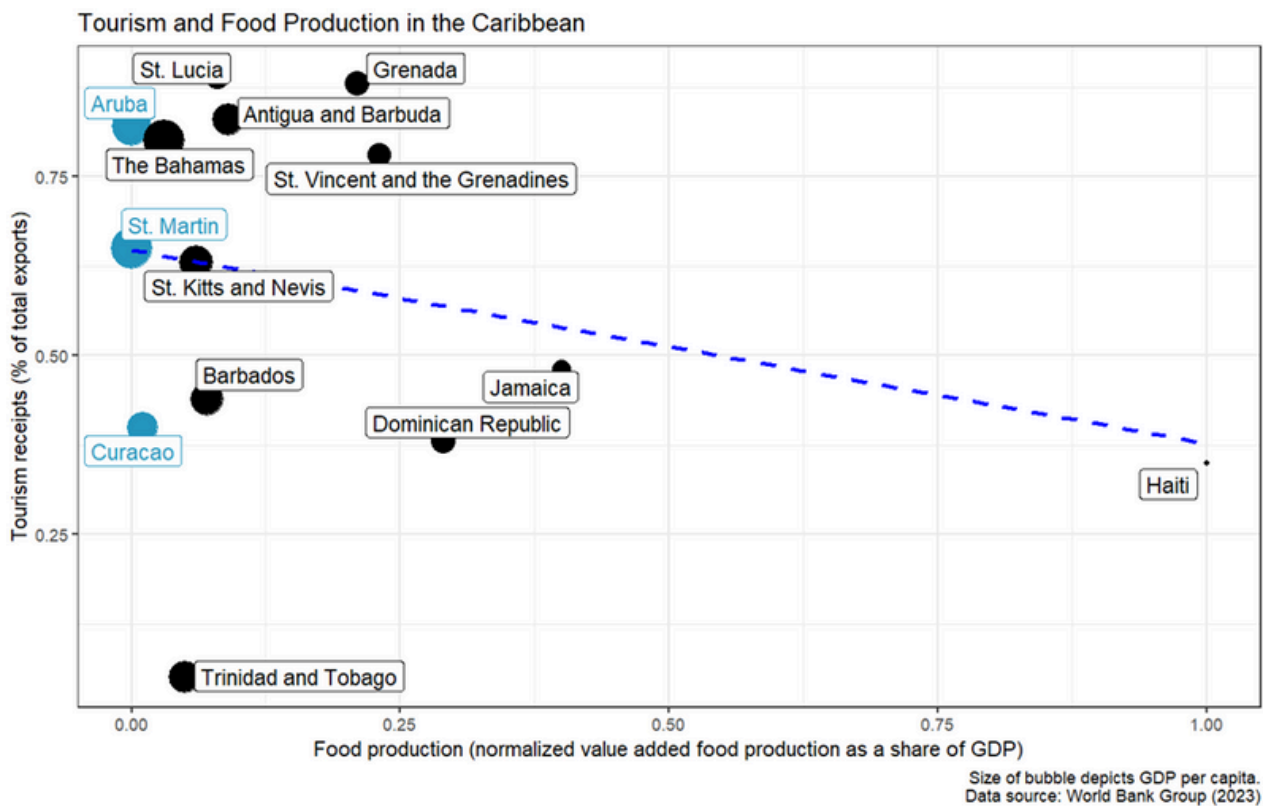
Source: World Bank Group (2023)

The high living standards in the CAS islands are closely linked to their heavy reliance on tourism as their main economic driver, while local food production remain limited. Tourism has historically fueled economic growth, attracting investments and fostering infrastructure development. As a result, the further development of tourism appears to be more attractive than the development of other sectors, including agriculture.

Limited local food production on these islands results from several factors, including constraints on arable land, climatic conditions, and a prioritization of tourism-related ventures over agriculture. Chart 2 illustrates this relationship by showcasing a cross-section of islands that highlights the correlation between tourism and local food production. The chart indicates that the focus on tourism has coincided with low levels of local food production, while the islands rely on imported goods to satisfy the needs of both residents and tourists. Among the CAS islands, represented in blue, all three demonstrate extremely low food production and high import dependency, with Aruba exhibiting the highest level of import reliance and Curaçao the lowest.

This reliance on tourism and imported food makes the islands vulnerable to disruptions, like the COVID-19 pandemic, which can significantly impact both tourism revenue and food supply chains.

Chart 2: Tourism development and Food production in the Caribbean

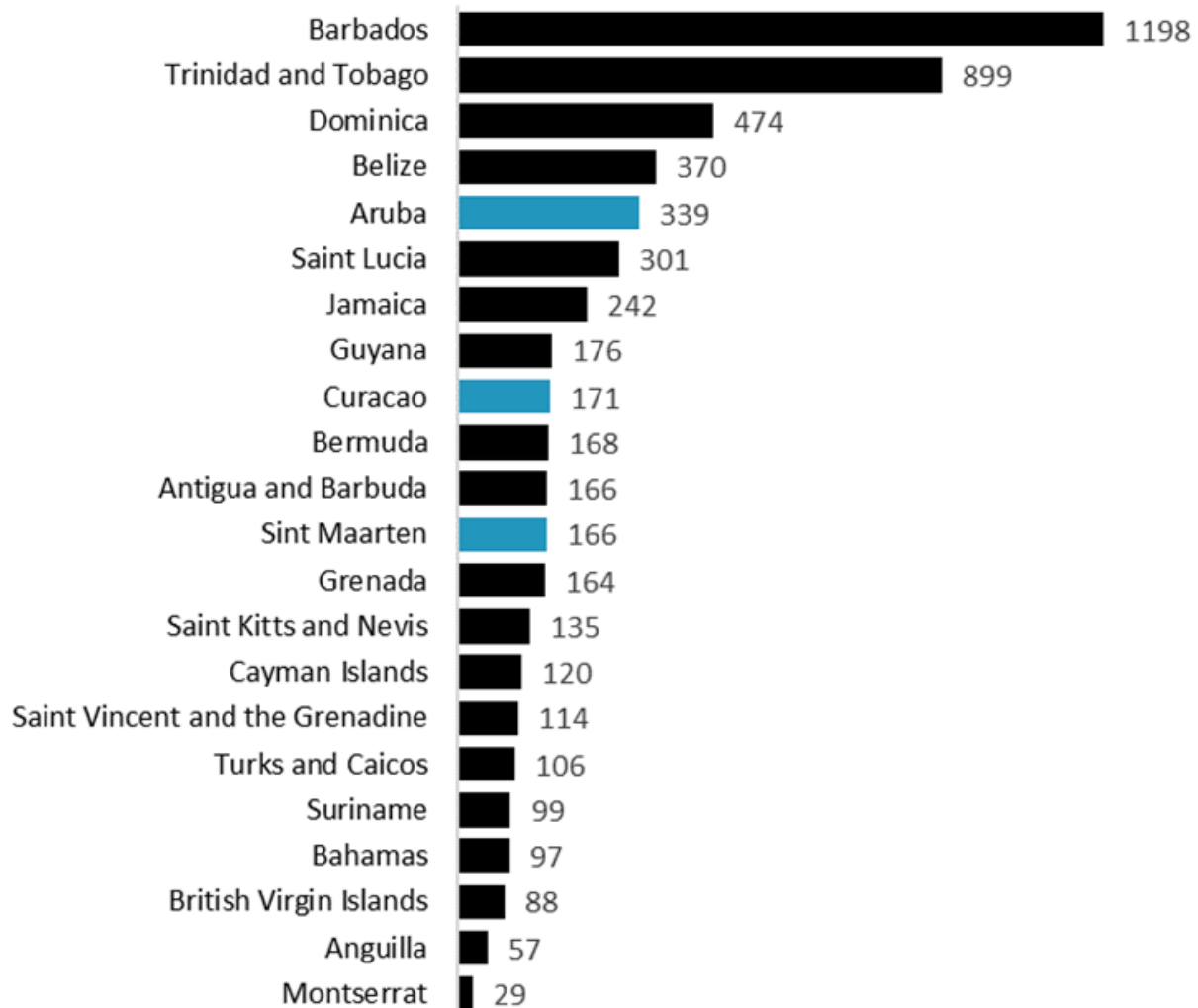


Authors' calculations, based on data from the World Bank Group. (World Bank Group, 2023)

Post COVID situation

In response to the COVID-19 pandemic, the governments of the CAS islands, in collaboration with various multilateral organizations and the Kingdom of the Netherlands, initiated concerted efforts to alleviate the impact on affected households and improve food security. This was achieved through a coordinated food assistance program implemented by the Red Cross in partnership with local organizations on the islands. The World Food Programme together with CARICOM undertook multiple rounds of surveys focusing on the impacts of the pandemic on food security and livelihood protection in the Caribbean, including the three CAS islands (see Figure 3). The survey conducted in June 2020, in particular, demonstrated significant representativeness across the CAS islands, providing valuable insights into the prevailing challenges and opportunities in sustaining the islands' socioeconomic fabric and food security amidst the crisis.

Chart 3: Food Security and Livelihood Protection survey sample size - June 2020



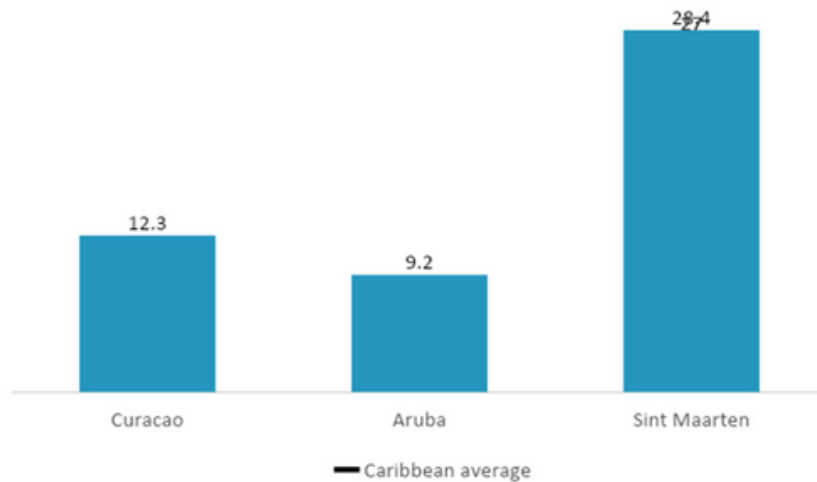
Source: World Food Programme (2020)

It is noteworthy that such a substantial sampling is conducted across the extensive Caribbean region, as this approach enhances the validity of the findings, particularly when comparing results among Caribbean counterparts.

Insights

The impact of the COVID-19 crisis on market access, as depicted in Figure 4, was notably more severe in Sint Maarten (28.4 percent) compared to the Caribbean average, with a larger proportion of households facing hindrances. Conversely, in Aruba and Curaçao, this impact was significantly less pronounced. Only 9.2% and 12.3% of households, respectively, encountered obstacles relative to the Caribbean average of 27%.

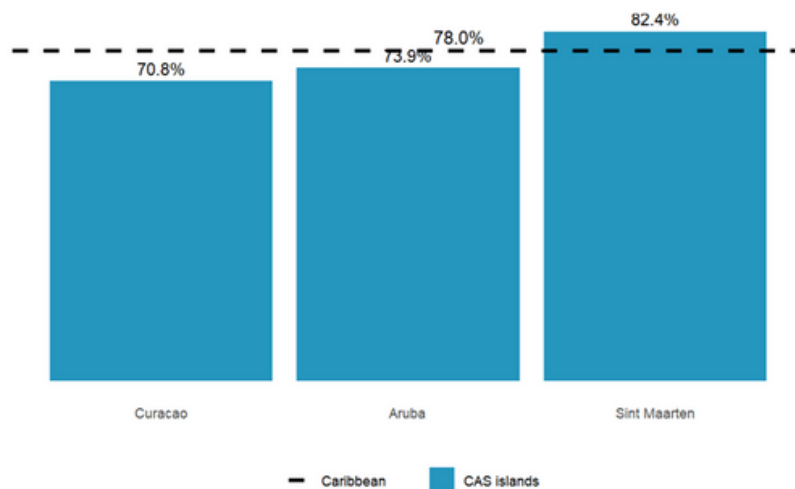
Chart 4: Access to market: In the past 7 days, was there a time when your household could not access the markets?



Authors' calculations, based on data from the WFP survey (2022)

The islands lack strategic food reserves, relying instead on efficient transportation systems, which were disrupted during the crisis due to the absence of just-in-time logistics. However, their highly developed tourism sectors had stockpiled food reserves to sustain the industry. When tourism demand abruptly ceased during the COVID-19 crisis, these excess food supplies originally meant for tourists, flooded the local consumer market. Wholesalers swiftly redirected these items to meet local demand.

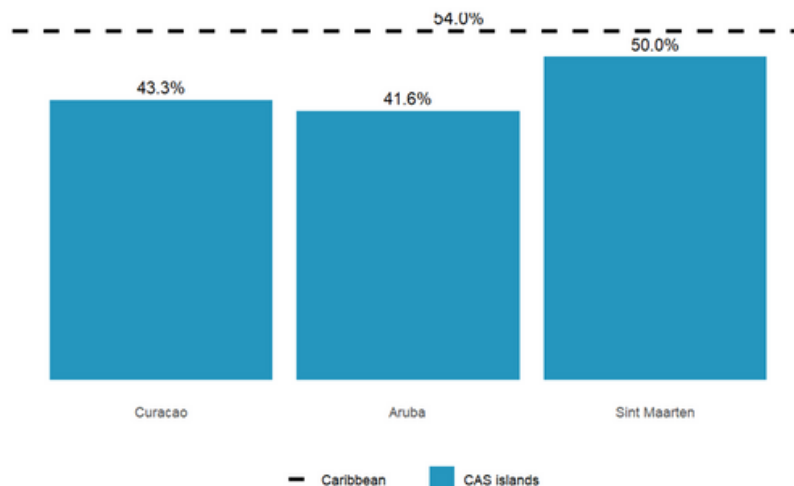
Chart 5: Has there been any changes in the costs of food items over the past 2 weeks



Authors' calculations, based on data from the WFP survey (2022)

The COVID-19 pandemic unleashed a wave of disruptions across the Caribbean, and the CAS islands were no exception. Significant disruptions in global trade and supply chains, led to imported inflation as a key factor driving food prices up in the CAS islands. With the imposition of lockdowns and travel restrictions, international trade faced unprecedented challenges, impacting the availability and cost of imported goods, including food items. As reduced international transportation hindered the flow of goods, the CAS islands experienced shortages and increased costs for imported food products. This scarcity, coupled with heightened demand and changing consumer behaviors, contributed to price spikes in the local markets. The heavy reliance of the CAS islands on imported food products, particularly given their limited domestic production capacity, magnified the impact of external price changes on local food prices.

Chart 6: % of respondents reporting that their ability to carry out livelihood activities was affected



Authors' calculations, based on data from the WFP survey (2022)

Remarkably, despite the perceived increase in the cost of food, the CAS islands experienced a lesser extent of disruption to their ability to carry out livelihood activities compared to their Caribbean counterparts. As previously noted, access to markets was not as severely impacted in these islands. However, an often-overlooked factor that played a significant role was the swift and substantial aid provided to the CAS islands by the Kingdom of the Netherlands government. This assistance was executed on the ground by the Red Cross in collaboration with local NGOs, delivering crucial food assistance directly to communities.

This concerted effort played a pivotal role in mitigating larger impacts on livelihoods in the CAS islands. By swiftly addressing food insecurity and

providing essential support to affected individuals and families, the aid efforts helped stabilize livelihoods and provided a crucial safety net during a period of heightened uncertainty and economic strain.

Summary and call to action

The ZonMw research project, comprising four papers that explore various dimensions of food security, reveals critical insights into the vulnerabilities faced by the Dutch Caribbean territories of Curaçao, Aruba, and Sint Maarten (the CAS islands) in the context of the COVID-19 pandemic.

Studies in [Aruba](#), [Curaçao](#) and [St Martin](#), as well as a [comprehensive analysis](#), highlight the urgent need for comprehensive strategies to enhance food security and economic resilience within the CAS islands. These strategies should emphasize diversifying economies beyond tourism and making significant investments in sustainable agriculture and local food production.

Key Actions:

- **Diversify economies:** Policymakers must prioritize diversifying the economies of the CAS islands beyond tourism. Investing in sectors such as agriculture and agro-processing can reduce reliance on imported goods and bolster local food production.
- **Enhance Food Security initiatives:** Governments and relevant stakeholders should strengthen food security initiatives, including improving transportation infrastructure, and promoting agricultural innovation and entrepreneurship.
- **Build resilient supply chains:** Efforts should be made to build resilient supply chains that can withstand disruptions, such as the COVID-19 pandemic. This may involve exploring alternative sourcing options, reducing dependency on imported goods, and fostering local partnerships.
- **Community engagement:** Engage local communities in food security initiatives to ensure their needs and perspectives are adequately represented. Encourage community-led initiatives, such as urban farming and community gardens, to enhance food self-sufficiency and resilience.
- **Collaboration and partnerships:** Foster collaboration and partnerships between government agencies, NGOs, academia, and the private sector to address food security challenges comprehensively. Pooling resources and expertise can lead to more effective and sustainable solutions.

By proactively addressing food security vulnerabilities and promoting economic diversification, the CAS islands can build resilience, improve local livelihoods, and ensure the well-being of their communities in the face of future crises. It is imperative for all stakeholders to collaborate toward a more sustainable and resilient future for the CAS islands.

#FoodSecurity #ZonMwResearch #CaribbeanResilience #COVID19Impact

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The Academic Council program was designed to facilitate connections and collaboration between island communities and academia, encouraging the sharing of academic research with diverse island stakeholders. It aims to establish a greater academic focus on island communities by utilizing islands' social, economic and cultural realities as the context for exploring these topics. Besides, it deepens relationships between island-based academic institutions globally and provide them with useful resources for disseminating their research.

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