

DEBrief

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Fighting Food Waste in the Tourism Sector: Challenges and Opportunities

- One third of all food produced for human consumption is lost or wasted every year.
- The tourism sector is a strategic industry to reduce food waste (FW), as the environmental and economic cost of FW is highest at the final consumption stage.
- Recovering from the COVID-19 crisis offers an opportunity for tourism players to better integrate sustainability as they rebuild, including being proactive about FW management.
- FW management cuts costs. A recent study found that hotels had, on average, a return of US\$7 for each US\$1 invested in FW management during a three-year timeframe.
- Tourism companies can create social and economic value by repurposing FW or donating surplus food to food banks.
- Latin America and the Caribbean offer unique opportunities to reduce FW in the tourism sector, including strong food banking networks and legislative advancements, among others.

SUSTAINABLE DEVELOPMENT GOALS

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



CONTEXT

The tourism sector has been hit extremely hard by the COVID-19 pandemic, putting an estimated 198 million jobs at risk.¹ At the same time, the vast social and economic impacts wrought by the crisis have put a spotlight on the interconnected issues of food security and food waste (FW)² and the need to address both.



The drastic disruption in tourism activity due to the pandemic offers an opportunity for hospitality businesses to take stock and consider FW management as a way to improve operating margins in a “new normal” and redirect the sector’s path towards a more sustainable future.

THE FOOD WASTE PROBLEM

Every year, one third of all food produced for human consumption is lost or wasted, amounting to 1.3 billion tons.³ The estimated economic value is of US\$936 billion. FW is also responsible for about 8% of global carbon emissions.⁴ Underlining its importance, FW has its own target within Sustainable Development Goal 12 (Sustainable Consumption and Production), aiming to halve global FW by 2030.

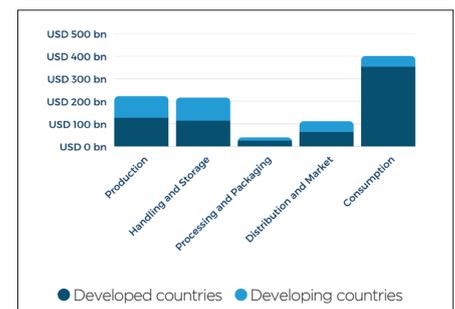


Food waste occurs throughout the value chain, from the farm to the table. In developing countries, most losses occur in the production, handling, and storage phases of the food chain. For example, Latin America and the Caribbean (LAC), one of the world’s prima-

ry breadbaskets, is responsible for 10% of global FW (127 million tons)⁵, in part due to weak infrastructure and poorly organized value chains.

In developed countries about 40% of FW occurs in the consumption stage. Since value is added to food as it moves through the value chain from production to consumption (i.e., from rice in the field to risotto served in a restaurant), the economic and environmental cost of FW is highest at the consumption stage.

Annual Value of Food Waste by Stage (US\$ billion)⁶



COMPETITIVE ADVANTAGES OF THE TOURISM SECTOR

While tourism is confronting many new challenges brought by the pandemic, the sector offers various competitive advantages for implementing FW management solutions. To start, tourism sector companies’ existing environmental management systems and green certifications are an ideal framework to begin working on FW management.

Another advantage is market and geographic concentration, which can facilitate the replication and scalability of good practices in FW management. Four cruise

1. WTTC (2020). [Travel & Tourism Recovery Scenarios 2020 and Economic Impact from COVID-19](#).
2. The acronym FW is used interchangeably to refer to both “food waste” and “food loss and waste”.
3. FAO (2011). [Global food losses and food waste - Extent, causes and prevention](#).
4. FAO (2015). [Food Wastage Footprint & Climate Change](#).
5. FAO (2014). [Food Losses and Waste in Latin America and the Caribbean](#).
6. Barclays (2019). [Food Waste: Ripe for Change](#).



corporations hold 85%⁷ of the market and 10 hotel companies account for about 60% of rooms globally.⁸ Similarly, the geographic concentration of tourism in big cruise lines, resorts, and tourist hubs such as Cancun leads to the generation of high amounts of FW in the same place.

Finally, since tourists are already familiar with other hotel sustainability efforts (saving water, reusing towels, reducing single-use plastics), the sector offers conducive conditions for behavioral change.



BUSINESS BENEFITS

It makes economic sense to invest in FW management. This is especially true for businesses operating in a reduced-revenue environment that are seeking to cut costs to improve operating margins. A Champions 12.3 study found that a sample of 42 hotels had, on average, a return of US\$7 for each US\$1 invested in FW management during a three-year time frame.⁹



Tourism sector companies can also create social and economic value by repurposing FW. This can mean redirecting FW towards other productive uses such as animal feed, compost, or bioenergy. Surplus food can also be recovered and donated to people in need through food banking. Fortunately, mobile apps are making it easier for restaurants and hotels to resell or donate edible surplus food.

Companies can also gain from reputational returns and improved stakeholder engagement by incorporating FW reduction measures into broader sustainability strategies and reporting.

DRIVERS AND ONGOING CHALLENGES

Key drivers of FW in the hospitality sector include: (1) a lack of clear directives from senior management, leading to less staff awareness of the issue and limited measurement of FW; (2) inefficient demand estimates, menu planning, and stock management; and (3) overproduction and inefficient food service models fueled by the industry's tendency to promote a sense of abundance around food to meet customer expectations.

An ongoing challenge is the lack of sector-specific data on FW. There are no reference values for FW generation per capita for hotels, cruises, or convention centers. Filling this gap is essential to establish a baseline from which to determine and measure sector targets for FW reduction. Digital technologies such as smart scales and software solutions can help address this challenge by allowing kitchens to measure FW at the source and optimize prevention measures.

Another challenge is the cultural and behavioral change needed to prevent and reduce FW, on both the business and consumer sides.

OPPORTUNITIES FOR LAC

The LAC region offers unique opportunities for reducing FW in the tourism sector. Not only is it home to some of the world's top tourism destinations, but it also has strong food banking networks and a burgeoning entrepreneurial landscape. Tech-driven enterprises aiming to tackle social and environmental challenges such as FW have been increasingly emerging.

There have also been advancements on the legislation front, particularly in 2019 with the passing of new FW laws in Colombia and Peru and the drafting of FW laws in at least six other countries in the region.

CONCLUSION

On one hand, the outlook for the tourism sector in terms of job and GDP losses is stark in the wake of the global COVID-19 pandemic. However, as hospitality businesses regain their footing and try to remain competitive as the tourism sector gradually reignites, integrating FW prevention and reduction measures can help cut costs, improve operating margins, and attract increasingly sustainability-conscious tourists.

LAC has the opportunity to become a testing ground for fighting FW in the tourism sector, generating lessons to inform efforts in other regions. IDB Invest is working with tourism sector clients to explore ways to integrate FW management into efforts to promote greater sustainability. ■

Additional Information

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This brief summarizes the findings of the September 2020 study, [Fighting Food Waste in the Tourism Sector: Challenges and Opportunities for Latin America, the Caribbean, and Beyond](#), which is part of IDB Invest's *Development through the Private Sector Series*.

Also see [The Food Waste Menu](#) for practical tips on FW reduction in the hospitality sector.

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The views expressed here are those of the authors and do not necessarily reflect the views of the IDB Group, its respective Boards of Directors, or the countries they represent.

7. Cruise Industry News (2020). [Annual Report 2020](#).
8. Hotels Magazine (2020). [Hotels 325 Ranking](#).
9. Hanson, C., Mitchell, P. & Clowes, A. (2018). [The Business Case for Reducing Food Loss and Waste: Hotels](#).