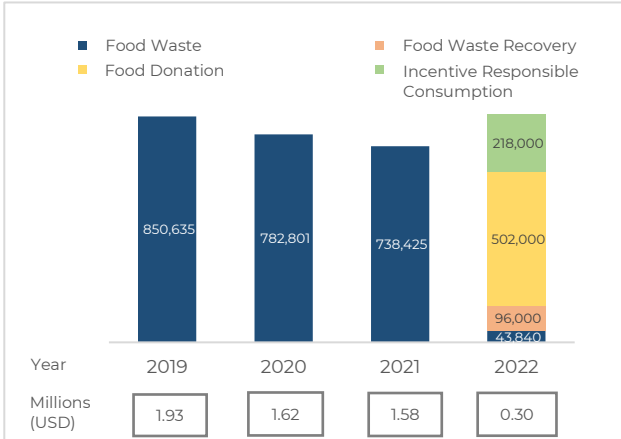# SUMMARY

Project and contact details

The name of the quality sustainability project (max. 100 characters)
Reduction in Food loss and waste in retail sector: a management and optimization program

Contact Person	Telephone	Email
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Organisation(s), country, where the project-members are working, including Web-page links
Cencosud Retail Peru S.A, Perú, www.wong.pe, www.metro.pe

Project description

The main objective of the project has been to reduce the Food loss and waste of edible products, generated alongside our supermarket operations in Peru. This is a major challenge that every supermarket worldwide faces.
We mapped every step of edible products life cycle once they are under our scope, and we decided to tackle the challenge focusing on 3 fronts:

1. Implement a system to encourage consumer demand when the product is in optimal condition but close to expiration date, thus avoiding the generation of food waste. Contribution to SDG N°12 "Responsible consumption and production"
2. Establish alliances with social organizations (i.e., Food banks) so as to donate those edible products close to expiration date which were not sold under point described above. Contribution to SDG N°02 "Zero Hungry" and N°17 "Partnerships for the goals"
3. Finally, if there remain stocks of edible products which were not recovered under both actions described above, then we seek alternatives to avoid final disposal in landfills (i.e., upcycling, to become compost or pig feed). Contribution to SDG N°13 "Climate action"

Quality methodology used to address the problem was through BPM cycle:

a. Planning and survey: data of KPIs of food waste were collected, determining that 850 tons of food were discarded in 2019 valued at USD 1,927,000 and generating GHG emissions (33 tons of CO2 equivalent.)
b. Analysis: we identified root causes, mainly the lack of an optimal system to apply discounts to merchandise close to expiration date, and no alternatives for products next to be discarded
c. Design: different alternatives for operational and IT-related solutions were identified:
   - implementation of a price degradation system through lot size at a physical and systemic level
   - a food donation process for those products that were not sold,
   and finally, if those measures were not enough,
   - opt for an upcycling alternative to avoid edible products end in a landfill
d. Execution: a pilot was implemented in July 2021. Once results and learnings were achieved, then the program was rolled out in every store
e. Monitoring: supervision was carried out by inventory managers and quality managers at a store level. An operational control reporting was established to identify risks, gain improvements, and comply with established flow
f. Optimization: opportunities for operational improvement were identified:
   - Responsible Consumption Incentive: sales and product identification were improved
   - Food Donation: systemic improvement in the registration of edible products suitable to be donated

Project began in July 2021 and ended in December 2022. Results are: 816 tons of food avoided as a waste, valued at USD 1,778,000, and avoidance of GHG emissions (143 tons CO2 eq). Contribution to Sustainable Development Goals: (1) avoiding use of land, water and fertilizers necessary to produce 816 tons of food which was avoided to enter in a landfill, (2) reduction of GHG emissions, (3) additional income for CENCOSUD due to sale of food next to expiration date, and also promoting a responsible consumption, (4) contribution to food security for low-income people, through food donations, (5) alliances with key local partners

Project leverage potential	Picture/Image describing the project

A processes mapping must be carried out, to identify new efficiency opportunities in waste management. This will enable improvements through discount policies, waste reduction policies, strategic alliances with waste assessment experts, and generating changes and improvements, from an AS IS to a TO BE mindset, with a friendly implementation and aligned with our core business

Food Waste Reduction (Kg - USD)

Legend: Food Waste, Food Waste Recovery, Food Donation, Incentive Responsible Consumption

Year	2019	2020	2021	2022
Food Waste	850,635	782,801	738,425	
Incentive Responsible Consumption				218,000
Food Donation				502,000
Food Waste Recovery				96,000
				43,840
Millions (USD)	1.93	1.62	1.58	0.30

Note. More information about the award and how to apply can be found on the IAQ Quality Award homepage

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