

NEAR-EXPIRED FOOD - BUSINESS OPPORTUNITY IN THE VIETNAMESE MARKET

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ABSTRACT:

The demand for food is continuously increasing day by day due to population growth. Adverse natural events, the COVID-19 pandemic and economic depression have created pressure on low-income people while the volume of wasted food is higher. Therefore, consumers should pay attention to near-expired food in order to meet the food demands and lower the volume of wasted food. This paper analyzes the opportunities to reduce the volume of wasted food by using near-expired food and business opportunities relating to near-expired food.

Keywords: near-expired food, food waste, Vietnamese market.

1. Introduction

In China, the number of young people finding and buying near-expired food is increasing significantly creating a trend in recent times. This is expected to help the world's most populous country limit food waste. The idea of "near-expired food" is self-explanatory. It refers to the food that is about to reach the expiration date but has yet expired. Near-expired food is commonly available in larger supermarkets, such as Walmart and Carrefour. These are foodstuff that is still within standard use limits but is sold at a high discount becoming items of particular interest to young consumers who want to save their expenditures. Is this a seasonal issue or will it be an emerging trend in the economy?

Food waste around the world is becoming more and more serious and causes a lot of economic damage. Let's see examples in some countries around the world. Every year, each French person throws away about 20-30kg of food, wasting between 12 and 20 billion euros (16). Each year, the

French supermarket industry also throws away about 750,000 tons of foodstuff while the restaurant industry in France throws away more than 1 million tons of food waste. This situation not only affects the economy and society but also puts a lot of pressure on the environment when food discharge activities account for 8% of greenhouse gas emissions - the cause of climate change. post on Earth. According to the United Nations, each year up to one-third of food produced worldwide is wasted, equivalent to 1 trillion dollars. The production of this wasted food also contributes to the release of 3.3 billion tons of greenhouse gases, or millions of tons of toxins, into the atmosphere (22).

In Vietnam, the amount of food waste is ranked after China among 8 Asia-Pacific countries. There is up to 87% of Vietnamese households waste at least two plates of food per week (6). This article will assess an expiring food business opportunity in Vietnam to promote "a kind of product" that helps reduce food waste now and in the future.

2. Increasing foodstuff demand

The global population has continuously increased requiring a huge food supply. Table 1 shows that the number of people born has increased over the years. On average, the world's population increases by 74,595,590 people every year.

The population of Vietnam is ranked third in Southeast Asia after Indonesia and the Philippines. It has risen during the five years from 2017 to 2021 (Table 2). On average, Vietnam's population has an additional 984,797 people every year. By 2021, our country will have more than 98 million people.

If we compare the population of the world and Vietnam, we see a common trend of increasing every year (Figure 1). This creates pressure on the demand for foodstuff, nutritious food for the entire Vietnamese people.

The demand for food is great but the supply cannot meet it. There are 1 billion people in the world who go to bed hungry. Vietnam has about 283,200 households experiencing periods of hunger, and 1,185,000 people experiencing hunger on average annually during the period from 2013 to 2017. These are households that cannot afford to buy 9 kilograms of rice per month (13). Therefore, if food waste is minimized, many Vietnamese people's meals are more nutritious, more meals with meat; more children have milk to drink. The situation of loss or waste globally will be more complicated in the context of supply chain disruptions and increased hunger due to the COVID-19 pandemic, as assessed by the World Food and Food Organization (FAO).

3. Food business opportunities

Food prices in the world have increased to the highest levels in more than a decade due to strong demand and loss of crops of some agricultural

Table 1. World population

Year	Population (person)	Change (person)
2017	7.547.858.925	83.836.876
2018	7.631.091.040	83.232.115
2019	7.713.468.100	82.377.060
2020	7.794.798.739	81.330.639
2021	7.837.000.000	42.201.261

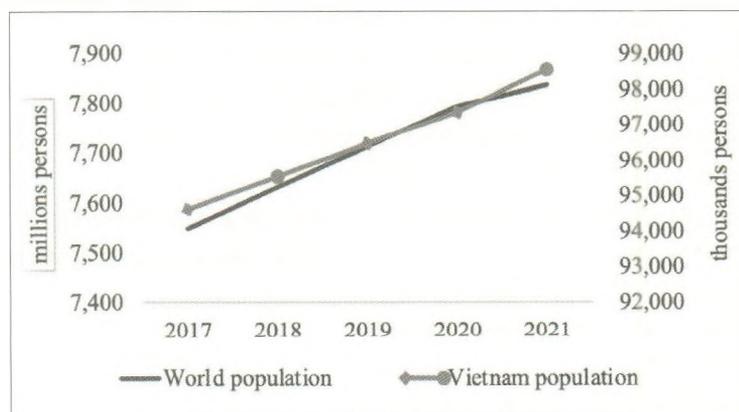
Source: danso.org

Table 2. Population of Vietnam

Year	Population (people)	Change (people)
2017	94.600.648	960.226
2018	95.545.962	945.314
2019	96.462.106	916.144
2020	97.338.579	876.473
2021	98.564.407	1.225.828

Source: danso.org

Figure 1: Comparison population of Vietnam and the world



Source: General statistics of Vietnam

products (4). Commodities with high prices include wheat, agricultural products, palm oils, soybeans, and sunflower seeds. These are the main ingredients directly related to meals in families. Grains, milk, meat, vegetable oil, and sugar all move in an upward direction pushing the prices of foods higher. There are several reasons leading to prices increase. Firstly, it is a common situation of closing borders, stopping flights, and tightening

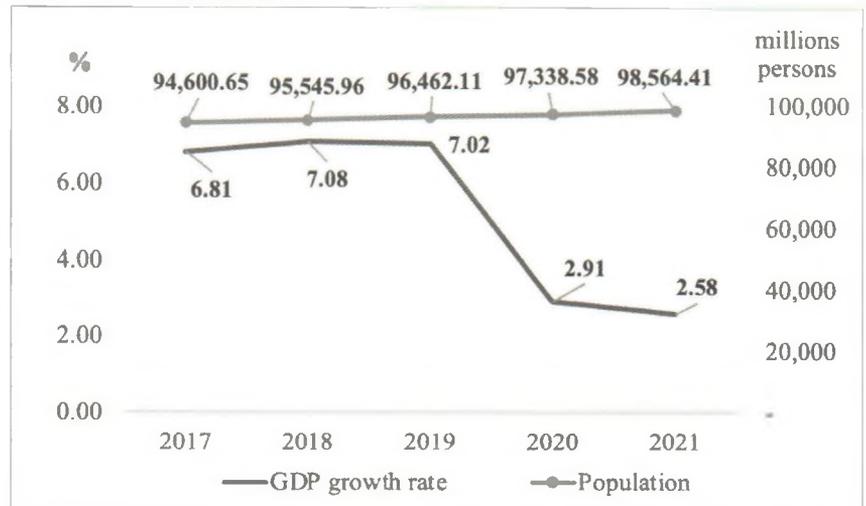
imports and exports. Therefore, consumption has been cut to a minimum level everywhere in many countries causing the global trade production chain to stagnate when both input and output of enterprises are constricted causing a decrease in the volume of goods. Secondly, countries' lockdown and distancing policies make it difficult for goods to be transported; shops, supermarkets, and markets are forced to close to avoid the spread of disease, leading to a gap between supply and demand. Thirdly, the complicated development of the epidemic affects the psychology of consumers causing the tendency of goods storage. It leads to a scarcity of goods as well as a gap between demand and supply. Fourthly, the pandemic caused production disruptions, businesses faced many difficulties leading to staff cuts, high unemployment affecting living standards, and consumers' incomes caused demand to fluctuate. Fifthly, the economic industries, especially manufacturing sectors often link and interact with each other but the COVID-19 pandemic have put pressure on the global supply chain forcing them to cut outputs. Sixthly, the COVID-19 pandemic has slowed down the transportation industry causing difficulties for production and goods delivery. In addition, the war between Russia and Ukraine - two major grain exporters in the world pushed the prices of grains higher.

Food demand is increasing while the selling price is also increasing highly creating pressure on many people around the world as unemployment increases but incomes plummet promoting the use of near-expired food. It is becoming more and more popular in many countries around the world as well as a practical solution to help daily meals at home have more nutrition in terms of shopping and spending. Let's take a

look around the world. In Brazil, high food prices have made many households here fall into difficult conditions. They bought items being about to expire but still are usable goods to save money because they are much cheaper than the original price, for example, a box of cakes with a week left of expiration costs as little as 1/6 of the original price. Therefore, buying imported near-expired items is an excellent way to satisfy their curiosity at affordable prices. In Japan, bread that is about to expire is sold online, in stores, and in parks to make it easy for many consumers to buy. In Denmark, many supermarkets have specialized in selling goods that are about to expire or damaged in packaging. In Yemen, the people living in Taiz city have rushed to buy near-expired food to save money.

The population increased when people's income was reduced due to the impact of the COVID-19 pandemic effect on living expenses. Therefore, consumers have to calculate and consider carefully before buying foodstuff for daily needs. Figure 2 shows the widening gap between the annual growth rate of GDP and population over the years from 2017 to 2021. This gap is even bigger since 2019 - the beginning period of the Covid epidemic when all economic activities were halted due to the

Figure 2: Comparison of GDP growth rate and Vietnam population



Source: General statistics of Vietnam

implementation of lockdown and social distancing. GDP growth is a measure of the health of the economy, so it also reflects the fact that workers are unemployed or temporarily suspended, leading to a difficult life.

Table 3. Underemployment rate of Vietnamese significantly rose

Year	Unemployment rate (%)	Underemployment rate (%)
2017	2,22	1,97
2018	2,19	1,62
2019	2,17	1,50
2020	2,48	2,52
2021	3,22	

Source: GSO

Table 3 further clarifies the difficult situation of life when the unemployment and underemployment rate of Vietnamese significantly rose in 2020 and 2021 - the period when the COVID-19 pandemic seriously affects the economy and society.

In China, during the COVID-19 pandemic, the number of consumers buying near-expired food online increased rapidly, accounting for more than 30% of sales. Each year, about 2 million people search for near-expired products on Taobao with more than 10,000 retailers providing near-expiration food-related offerings (24). Shops selling expired groceries have begun popping up in Beijing and other major Chinese cities. In 2020, the number of businesses with expired food business registrations in China is 12 and will increase to 68 in 2021.

One more sign of attraction is that middle-income consumers are also a popular segmentation using near expired food. In the US and Canada, customers can check for near-expired products at supermarkets to buy through the application (18). With the current economic troubles, expired foods are increasingly becoming a part of America's diet. Salvage stores are seeing a steady uptick in business from cost-conscious consumers. While

other businesses may be suffering during these lean economic times, near-expired foodstuff has increased highly over the past year. It is estimated that the global near-expired food industry will be worth US\$6.3 billion by 2025, up from \$5 billion last year. This number means that the near-expired food industry is expected to maintain a growth rate of about 6% per year through 2025 making it attractive now and in the future.

Using food that is about to expire is motivated by economic circumstances because consumers face the problem of how to have enough food in their meals. What about the safety and nutrition of these products? The main concern in the near-expired food industry will still be food safety. The current law only defines the term "near-expired food". Whether the food near the expiration time is affected by factors like temperature, logistics, or inventory environment can only be found upon consumption. The main aim for consumers is to "buy non-discounted quality at a discounted price." Once there is a quality problem, consumers will not purchase again. According to the United States Department of Agriculture, A "Best if Used By/Before" date indicates when a product will be of the best flavor or quality; A "Use-By" date is the last date recommended for the use of the product while at peak quality. It is not a safety date except for when used on infant formula as described below (25). The Grocery Manufacturers Association (GMA) and the Food Marketing Institute (FMI) have been working with 25 manufacturers and retailers to standardize the use of only two terms: "best if used by" to indicate best quality/taste dates, and for perishable foods, "use by" to give the date after which the food should be discarded (17). The food dates or "expiration dates" we're so familiar with are not indicators of food safety at all, they are simply the manufacturer's suggestion as to when their product is of the best quality. The U.S Food

and Drug Administration (FDA) announced in May 2019 that it “strongly supports” the GMA and FMI efforts to use the “best if used by” label to designate food quality. When it comes to food safety, the FDA said manufacturers can put whatever terminology they want to convey health risks. But while the FDA is encouraging manufacturers to use “best if used by” as a best practice, it is still not required by law. There is no federal law that requires dates on food, except for infant formula. It turns out that the dates on our food labels do not have much to do with food safety. In many cases, expiration dates do not indicate when the food stops being safe to eat - rather, they tell you when the manufacturer thinks that product will stop looking and tasting its best. Some foods, such as deli meats, unpasteurized milk and cheese, and prepared foods such as potato salad that you do not reheat, probably should be tossed after their use-by dates for safety reasons. If you aren’t going to be able to eat something in your fridge before it goes bad, consider tossing it in the freezer. You can safely freeze almost any food at or below 0 degrees Fahrenheit except for canned food and eggs in their shell, and it will not significantly reduce the amount of nutrients in that food. Because of confusion about the meaning of dates displayed on the label, consumers or retailers have thrown away wholesome food. But there are some kinds of foods that can be eaten past the expiration date if properly stored such as canned goods, eggs, bread, pasta, frozen food, dry goods, etc. The near-expired food allows consumers to purchase

real products at a low price both online and offline. Many food products near the end of their shelf life are sourced by online merchants from offline physical stores. This helps brick-and-mortar retailers to clear inventory and reduce their losses, while online dealers offer them at an enticing price to the broader audience of online shoppers. There are three main sources of near-expired food. One is the products that are removed from the shelves of supermarkets, they are collected and turned on the e-commerce platform. Its supply depends on the normal food sales volume in peak periods. When the food product sells, the near-expired food supply will be reduced accordingly.

4. Conclusion

Products that are close to their expiration date or products that are about to expire are still being used in many countries around the world. However, this only stops at a small level, leading to a lot of products being thrown away while still being safe to use. If these products are used, it will reduce waste as well as the spending burden for many people. The fact that young Chinese people hunt for food that is about to expire opens up business opportunities not only in the Chinese market. In Vietnam, many food products that are about to expire are thrown away every year while there is still a shortage of food. In the context of high prices due to economic impacts, epidemics, disruption of the global supply chain, etc., organizations and individuals involved in this type of goods trade will limit the situation of food waste, creating opportunities for many low-income people to improve their nutrition ■

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THỰC PHẨM SẮP HẾT HẠN - CƠ HỘI KINH DOANH TẠI THỊ TRƯỜNG VIỆT NAM

● TẶNG THỊ BÍCH HIỀN

Đại học Nguyễn Tất Thành

TÓM TẮT:

Nhu cầu về lương thực, thực phẩm không ngừng tăng lên từng ngày, do dân số ngày càng tăng. Mặt khác, những tác động tiêu cực từ thiên nhiên, đại dịch COVID-19, suy thoái kinh tế đã tạo áp lực lên những người có thu nhập thấp trong khi tình trạng lãng phí thực phẩm vẫn diễn ra ở mức cao. Do đó, người tiêu dùng cần quan tâm đến việc sử dụng các thực phẩm sắp hết hạn, nhằm đảm bảo nhu cầu lương thực, cũng như giảm lượng chất thải từ thực phẩm. Bài viết này phân tích cơ hội giảm thiểu lãng phí thực phẩm thông qua sử dụng thực phẩm sắp hết hạn và cơ hội kinh doanh từ loại thực phẩm này.

Từ khóa: thực phẩm sắp hết hạn, lãng phí thực phẩm.