

Organization

FAO Conference 4P<sup>er</sup> Session





**Committee:** Food and Agriculture Organization (FAO) **Topic:** Navigating the Challenges and Opportunities in the Consumption of 3D-Printed Food **Written by:** Yvan Giron and Lizbeth Gonzalez

Welcome delegates to SPIMUN 2024! We hope your delegations show your best effort in this MUN, solving the developing problems of the world and acting like outstanding leaders and contributors to problem-solving in the global tier.

Your moderator will be Valentina Cruz Noriega, director Yvan Girón Escobar, and your secretary Patricio Ramirez.

If you have any questions, feel free to contact us at: <a href="mailto:spismunpaseo@sanpatricio.edu.mx">spismunpaseo@sanpatricio.edu.mx</a>

Sincerely, Yvan Giron

## I. COMMITTEE BACKGROUND

FAO (Food and Agriculture Organization of the United Nations.) is one of the leading roots of the United Nations (UN). FAO is in charge of the International protection and waste management of global food. This committee has been active for the last 78 years, founded in 1945 in Quebec (Canada) its actual director Qu Dongyu, and its headquarters



located in Rome, Italy is also highlighted since its parent organization was the United Nations Economic and Social Council (ECOSOC). FAO has been a pillar committee of the UN, since its foundation. Food has also been an issue when talking about the economy. Millions of dollars (reference: coin) had been lost because of waste. For reference, studies have shown that 1 trillion dollars are wasted because of food, and in the USA 30-40% of food is wasted.

## II. HISTORY OF THE TOPIC

Technology has been advancing in a plethora of ways in the last few years, reaching the point of even being presented as a problem but also an opportunity for the globe.



Moreover, food waste or food loss is a global challenge reaching high levels, accounting for one-third of the total food production due to the lack of progress in storage and the limited infrastructure. Despite the challenges

that world hunger presents, advancements in technology, such as 3D printing, offer potential solutions. Some proponents argue that 3DPF could

revolutionize the way we produce and consume food, potentially reducing waste by allowing for precise customization of ingredients and portion sizes.

However, 3D-printed food, according to an article in the Minnesota Journal of Law, Science & Technology, has been marked as an issue of safety because it can cause food poisoning or similar harm. Due to its



semi-automated, additive manufacturing process these ultra-processed foods, may reduce the quality of diets and lead to adverse health outcomes. It also presents a short lifespan that can be attributed to a surging issue of waste and eating of processed food, plastics, and silicone are included in these foods. The excessive inversions, the big powerhouses in the world invest trillions of dollars on the 3DPF and the constant demand of this can make the actual economy fall to ashes.

### III. CURRENT ISSUES

#### China

China has always been characterized as a big country, being one of the big powerhouses and a population of more than 1 billion people. Overcrowding



and poverty have also been an issue in China, which is why Chinese people have implemented 3D-printed food in their society. As stated before this can lead to various casualties in China, one of the latest developments of 3D-printed food in China

was the Taobao festival, another impulse for the Chinese people to develop 3D-printed food was the pandemic. People were suffering from hunger during the pandemic, and millions died but 3D-printed food just worsened the situation, billions of equipment and the latest issues of 3D-printed food worsened the situation for the Chinese people, suffering from the intoxication and poisoning China is one of the most important countries on this problem since the excessive history in the use of food 3D printers.

## **United States**

The United States of America (USA) has also been characterized as being one of the countries that make constant improvements in technology, but

the 3D-printing of food in the actual times has become a very constant theme to talk about since the USA is the principal source of food came from the 3D printers, according to GRABCAD. BLOG more than 35% of the addictive



franchises and manufacturing companies use 3D Printers. This means that in the hand of addictive franchises the most registered one is Kentucky Fried Chicken (KFC) and on the other side of the coin new companies like Nūfood, BeeHex, byFlow, 3Desserts, Graphiques, Revo Foods, Redefine Meat. Using the 3D Printing of food as a propaganda method is also remarkable that in the US Billions of dollars are being used to finance the construction and maintenance of 3D Printing food.

## Australia

Australia is also one of the big ones when it comes to the food economy etc, the 3D Printing of food in Australia has become such a thing that it is



ranked 3rd in the manufacturing of 3D printing. The biggest problem in Australia in the area of 3D printing is that 3D-printed parts can turn into germ-filled petri dishes in just a few weeks. Some materials can withstand the dishwasher, but dangerous bacteria like E coli and salmonella that live in small nooks and crannies can survive as well. Australian people have suffered from this bacteria that surges from using 3D Printing food. 3DPF is not a constant source in Australia but the way people are using it is just excessive in all aspects, as stated before the aspects that this can affect are just fatal for the Australian people.

#### United Kingdom

The United Kingdom is also one of the countries that use more the use of 3D Printing food people have noticed that the UK government has been putting its efforts into constructing 3D printers of food which makes

an inversion of millions of dollars the constant inversions the UK doing is prejudicing the market and economy of the country, the constant pressure on the making of food ink is a issue to consider for the UK, is also remarkable



that there are not any study area for the printing of food and the construction of the 3D printers. The massive amounts of inversion of 1.2 billion dollars in pure 3DPF in part of the UK, if this constant inversions continue the UK may (in the future) destroy the United Kingdom economy, according to statistics by 2030 the industry of 3D printing food will be as valuable as 8.49 billion dollars. The problem with the UK is the massive inversion this country insists on putting on the 3D printing of food.

#### IV. UN ACTIONS AND RESOLUTIONS

The 3D printing food industry has become increasingly a concerning problem for the world, but as this is a surging problem the correct procedures for the making of solutions, unfortunately, have not been taken into account many pages see this issue as a good thing because of the "revolutionary" way to make food, but as stated before the surging problems of hygiene the massive amount of money invested on this industry and the poverty that "makes" people rather taking the 3D printing industry as a way to dodge the problems has made the 3DFP a real threat to the economy and society, actually the UN is on an investigation on resolving to stop the 3D printing of foodstuffs,

#### V. ESSENTIAL QUESTIONS

- 1. What is 3D Printing food?
- 2. What are the current ingredients and filaments included?
- 3. What are the main "restaurants" that use 3DPF?
- 4. Which countries invest more in 3DPF?
- 5. What are the harms this problem brings?
- 6. Which types of food are being made with the 3D printers?

#### VI. <u>CONCLUSION</u>

In conclusion, FAO (Food and Agriculture Organization) plays a very important position in global food safety and waste control. However, food waste remains an extensive issue, this leads to financial losses and high degrees of wasted food. 3D-printed food is visible as a potential solution to world hunger, but it takes serious risks and challenges. This includes malnutrition, bacterial growth, and probably the use of toxic materials. China, the USA, Australia, and the UK are very involved in 3D-printed foods, however, every country faces its situation. This consists of toxicity issues, overreliance, bacterial growth, and excessive investments. The United Nations recognizes the 3D printing food industry's importance and is actively looking for solutions. It is essential to prioritize health, safety, and financial implications, to find better ways to feed the growing global population.

# VII. <u>REFERENCES</u>

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