

Legal Mechanisms to Guarantee the Consumer's Right to Safe Food under Algerian Legislation

الآليات القانونية لضمان حق المستهلك في غذاء آمن وفق التشريع الجزائري

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Abstract:

Consumers are always exposed to numerous risks that threaten their lives in various sectors, most particularly food-related risks which happened from the consumption of unsafe and contaminated food products, whether of animal, agricultural, or industrial origin.

Consumers have the right to safe food that meets their needs. However, many risks exist at various stages of food production, posing a real threat to consumer health and life. Therefore, the Algerian legislator has established an arsenal of legal and regulatory framework, relying on different principles, mechanisms, and various devices concerning different sectors involved in food production, to avoid these food-related risks.

Keywords : Safe food, consumer, food risks, protection, unsafe food.

الملخص:

يتعرض المستهلك لعدد من المخاطر التي تهدد حياته باستمرار في مختلف المجالات، ومن أهمها المخاطر الغذائية التي تحدث بسبب استهلاك مواد غذائية غير آمنة وملوثة سواء كانت ذات مصدر حيواني أو زراعي أو صناعي. من حق المستهلك الحصول على غذاء آمن يلبي حاجياته، لكن هناك الكثير من المخاطر التي تحيط بمختلف مراحل إنتاج الغذاء والتي تشكل تهديدا حقيقيا على صحة وحياة المستهلك، لذا وضع المشرع الجزائري ترسانة قانونية وتنظيمية هامة، معتمدا على مبادئ وآليات وأجهزة مختلفة تخص مختلف القطاعات المتدخلة في إنتاج الغذاء من أجل تجنب هذه المخاطر الغذائية.

الكلمات المفتاحية: غذاء آمن، المستهلك، مخاطر غذائية، حماية، غذاء غير آمن.

Introduction:

In the introduction, the author(s) should submit a brief prelude to the topic, as well as the main problematic, hypotheses to be tested, including the outlines, or the general themes of the article and all methodological frameworks academically agreed in the introduction.

The sources of food vary, there are foods of animal origin such as various types of meat, eggs, milk and dairy products, fish, and other seafood. There are also foods of agricultural origin such as grains, vegetables, and fruits, in addition to processed foods, which are numerous and diverse, including canned goods, drinks, sweets, and so on Only as stipulated in Executive Decree No. 90-39 dated 03 Rajab 1410 corresponding to 30 January relating to quality control and suppression of fraud

Food is extremely important in the lives of consumers, as it is the source of energy that promotes physical and mental health. Therefore, consumers strive daily to obtain safe food that meets their needs. For this reason, most countries endeavour to provide suitable food for all their citizens.

Facing the diversity of food sources and the variety of methods used to produce and process it, food has become a significant threat to consumer health. This is because food is easily contaminated, whether by various microorganisms such as bacteria, viruses, and parasites, or by chemicals like harmful fertilizers and pesticides, or by physical materials such as paper, glass, gravel, and plastic, etc.

When food becomes contaminated, it can pose a risk to consumer health due to the diseases, poisoning, and even death it can causes.

A World Health Organization report dated October 4, 2024, revealed that approximately 600 million people - one in ten worldwide - fall ill each year due to consuming unsafe food, resulting in 420,000 deaths. Children under the age of 5 years account for 40% of these cases.

To guarantee the consumer's right to safe food and provide effective and complete protection from the risks associated with unsafe food, the Algerian legislature has established a legal and regulatory arsenal, reinforced by various devices and mechanisms operating across all sectors involved in food production. In this context, we ask:

What legal mechanisms has the Algerian legislator established to guarantee the consumer's right to safe food in light of the growing food dangers?

This research paper aims to clarify the meaning of safe food and related concepts, while also addressing the conditions that render food unsafe and the legal measures adopted by the Algerian legislator to ensure its protection from food dangers.

We will attempt to answer the above-mentioned question by addressing the following points:

- First point: A conceptual approach to safe food.
- Second point: The legal basis for guaranteeing the consumer's right to safe food.

1. First point: A conceptual approach to unsafe food.

The Algerian legislator, in Law 09-03 of February 25, 2009, as amended and supplemented by Law 18-09, stipulated that products intended for consumption must be guaranteed and safe for their intended legitimate use, and must not harm the consumer's health.

To explore deeper into this topic, we will first try to clarify what is meant by food security as defined by the legislator. Is it food security or safe food?

Firstly: Food Security

The 1996 World Food Summit defined food security as a situation where all people at all times have material and economic access to sufficient, safe, and nutritious food to meet their dietary needs for an active and healthy life.

The Food and Agriculture Organization (FAO) also defines food safety as all the necessary conditions and norms during the production, processing, storage, distribution, and preparation of food to ensure that it is safe, reliable, healthy, and suitable for human consumption. Food safety is related to all steps of agricultural production, up to the moment of consumption by the last consumer (Kardaniz, 2022, p 362).

The World Food Security (CFS) Committee defines it as the material, economic, and social ability of every person to access adequate, safe, and nutritious food to meet their nutritional needs for a healthy and active life.

The Arab Organization for Agricultural Development defined food security as the continuous provision of food, in the quantity and quality necessary for activity and health, to all members of the Arab nation, relying on local production.

The US Department of Agriculture defined food security as the means of facilitating access to sufficient food at all times, thereby promoting human well-being and health. (Hafiani, Shawqi. 2022-2023, P39).

It is clear from the preceding definitions that food security is a purely economic concept, fundamentally linked to the concept of self-sufficiency, which a country relies on its own resources to meet all the needs of its society without thinking to imports. Therefore, food security is the provision of sufficient food for every member of society at all times and under all circumstances.

Accomplishing food security leads us to another, more advanced concept, which is sustainable food security, which is the optimal use of available resources, ensuring that the population's food needs are met in the present and future, as well as protecting agricultural products from spoilage, rationalizing consumption, achieving environmental balance, and protecting the consumer, while ensuring the provision of sustainable food at prices that are compatible with the incomes of members of. (Hafiani, Shawqi. 2022-2023, P42).

1/ Extents of Food Security

To ensure food security is not disrupted, the Food and Agriculture Organization of the United Nations (FAO) has established four dimensions that form the basis of food security:

A/ Availability: This refers to the availability of food in markets and places of sale. This dimension is linked to a country's ability to provide food, whether through domestic production or importations from other countries.

B/ Access: This refers to the ease of access to food, meaning the ability of all individuals to get food. It is divided into:

- Economic or material access refers to the extent to which individuals can have food by purchasing it at affordable prices.
- Material access refers to the ease of admission to food through its availability in all markets and regions.

C/ Utilization: This refers to the factors that affect the proper use of food, i.e., food quality, which is related to the absence of any dangers. The proper use of food depends on factors such as its transportation, preparation, cooking, and storage, etc.

D/ Stability: This refers to having access to food at all times, unaffected by factors such as wars or natural disasters. Stability can only be achieved through the state's capacity to store food and sources diversify

Secondly: Safety food

Article 3 of Law 09-03 defines safety as looking for the optimal balance between all relevant elements to minimize the risk of injuries within the limits permitted by the work environment.

Safe food is food that is free from anything not considered part of its composition that could pose a risk to the consumer. The World Health Organization defines it on the base of food safety, considering it the guarantee that members of society have access to safe, reliable, and healthy food that is fit for consumption and free from any substances that could endanger the consumer's health (Hafiani, Shawqi. 2022-2023, P43).

Safe food is food completely free from any contaminants and dangers, whether biological (natural), such as various microorganisms like bacteria, viruses, and parasites; chemical, such as harmful fertilizers, pesticides, antibiotics, and various toxins; or material, such as packaging plastic pieces, paper, gravel, etc...

Through these definitions it is revealed that safe food must be free from any contaminants, regardless of their nature; that is, the risk level in food must be completely zero. In reality, safe food is a health concept, unlike food security, which is a purely economic concept.

Thirdly: The Relationship Between Food Security and Safe Food

Although the concept of safe food differs entirely from food security - the former is health-related and the latter is economic - but they are complementary concepts and it is difficult to achieve food security without safe food. It is illogical to achieve food security by providing sufficient quantities of unsafe and contaminated food that poses a risk to consumer health. Furthermore, it is difficult to establish food safety and security standards in the absence of sufficient food supplies.

Fourthly: Food Sovereignty

Another concept known as food sovereignty emerged through a movement called ViaCampesina, which represents an international farmer movement. This concept appeared at the World Food Summit organized by the Food and Agriculture Organization of the United Nations in Rome in 1996, where the concept of food sovereignty was presented as a synchronised concept with the concepts discussed previously, as it reflects a particular vision of the right to food, based first on the idea that such a basic right can only be achieved through a system that guarantees food sovereignty. From 2023, this concept moved towards the right of peoples to self-determination in agricultural and food affairs, or in other words, towards the emergence of another model free from any form of dumping by multinational agribusiness companies (Clemenceau 2020, PP 20-21).

Food sovereignty seeks to prioritize local markets rather than going to a market economy and to regulate agriculture through World Health Organization agreements, which actually explains its very rare use by international institutions, unlike food security, which is only concerned with the quantities of food available. However, these concepts do not seem to be completely separate, but rather can be united in protecting and promoting the right to food.

Hence lies the difficulty of abandoning the productivity of large corporations promoted by the Food and Agriculture Organization (Clemenceau. 2022-2023, P43).

Fifthly: The Transformation of Safe Food into Unsafe Food

Safe food can easily become unsafe. As previously mentioned, food has many sources, and each type of food has specific conditions and standards for preservation until it reaches the consumer. However, the surrounding environment can often change, compromising these preservation conditions and standards. This can lead to changes in its form, composition, and properties, as well as contamination, transforming it into unsafe food.

Unsafe food is food that has been contaminated by many different factors. Article 3 of Executive Decree 12-214, which specifies the conditions and procedures for using food additives in foodstuffs intended for human consumption, defines this as follows: A contaminant is defined as any substance not intentionally added to food but present in it as glass residue, including processing applied to agriculture and livestock, and in veterinary practice, at all levels of production, transformation, preparation, handling, packaging, transport, and storage of the food, or environmental contamination. Often, the machinery and materials used in food canning and packaging can be a source of contamination, rendering food unsafe.

Other contaminants include natural ones such as various types of bacteria, viruses, and parasites. These microorganisms contaminate food just by contact, either directly or indirectly through contaminated surfaces and utensils. Pollutants may also be environmental, such as high temperature and humidity, or chemical, through food exposure to chemicals, such as the contamination of vegetables, fruits, and grains with fertilizer residues and various chemical treatments, or through the contamination of various types of meat, eggs, milk, and its derivatives with veterinary drug residues, such as antibiotics used when raising animals without respecting the conditions for their use, which may lead to the emergence of what is known as antibiotic resistance; this dangerous phenomenon has become a global health crisis, as confirmed by the World Health Organization.

2. Second point: The Consumer's Right to Safe Food

Article 11, paragraph 1, of the International Covenant on Economic, Social and Cultural Rights affirms the right of everyone to an adequate standard of living for themselves and their family, offering adequate food, clothing, and housing, and to the continuous improvement of their living conditions. States neighbouring undertake to take the necessary measures to safeguard this right, recognizing in this regard the essential importance of international cooperation based on free consent. Article 11, paragraph 2, of the International Covenant on Economic, Social and Cultural Rights also affirms the recognition of everyone's fundamental right to be free from hunger. States neighbouring to this Covenant undertake, through their individual efforts and international cooperation, to take measures, including concrete and specific programs, to ensure the following:

A) Improving methods of producing, preserving, and distributing food by fully utilizing technical and scientific knowledge, disseminating nutritional principles, and developing or reforming agricultural land allocation systems to ensure optimal development and utilization of natural resources.

B) Ensuring the equitable distribution of global food resources in light of needs, taking into account the challenges faced by both food-importing and food-exporting countries.

The consumer is considered the weaker party in the contractual relationship, yet they constantly strive to obtain safe food that meets their needs. Therefore, it has become essential to rely on specific legislation to protect them from consuming unsafe and contaminated food. Hence, Law 09-03 concerning consumer protection and the suppression of fraud was enacted, based on fundamental principles that establish a series of obligations incumbent upon stakeholders to guarantee food production.

Firstly: Mandatory Hygiene and Sanitation of Foodstuffs and Their Safety

Hygiene encompasses all measures, practices, and standards adopted to ensure the safety, security, and suitability of food at all stages of its production. Given its principal importance, the Algerian legislator has mandated that all those involved in the food industry adhere to hygiene standards. This represents a set of necessary procedures for controlling risks at every stage of food production and distribution, with the aim of preventing the transformation of safe food into unsafe food through contamination.

The Algerian legislator, through Article 6 of Law 09-03, emphasized the obligation of all stakeholders to respect hygiene and sanitation requirements at every stage of food production and distribution. This includes the necessity of maintaining hygiene and sanitation for both workers and food production facilities. Article 7 further stipulates that equipment used in food production must be free of any contaminants that could render safe food unsafe. Therefore, it is clear that the Algerian legislator has imposed hygiene and sanitation requirements on everyone involved in food production throughout all stages of the process.

The Algerian legislator issued Executive Decree No. 17-140 dated 14 Rajab 1438 corresponding to 11 April 2017, which specifies the conditions of hygiene and sanitation during the process of placing food products for human consumption. Which is known through the cleanliness of food products through Article No. which states (and is called in the body of the text "cleanliness", are the procedures and conditions necessary in order to control hazards and ensure a clean character for human consumption of the food product in view of its specific use).

Secondly: Mandatory Product Safety.

To ensure consumers have access to safe food, the Algerian legislator has emphasized the requirement that products intended for consumption, including foodstuffs, be guaranteed safe. Food safety is defined in Article 3 of Executive Decree 17-140 mentioned above, which states that food safety is the guarantee that food products pose no risk to the consumer when prepared and/or consumed according to their intended use. To this end, Executive Decree No. 12-203, concerning the rules applicable in the field of product safety, was issued. Article 5 of this decree stipulates the necessity of maintaining hygiene standards in food production facilities and among personnel working in this sector, while adhering to specific measures for tracking the movement of goods from production to purchase. Article 6 of the same executive decree emphasizes the requirement to demonstrate product conformity with mandatory safety standards. Furthermore, the Algerian legislator has obligated producers and importers to provide consumers with all necessary data and information that can help them avoid risks associated with consuming goods, which may include foodstuffs, as stipulated in Article 10. Finally, according to the text of Article 12 (Every operator must conduct product conformity checks before offering the product for consumption in accordance with the legislative and regulatory provisions in force. These checks are commensurate with the nature of the

operations carried out by the operator, according to the size and variety of products that it puts up for consumption, and the means that it must possess, taking into account its specialization and the rules and customs recognized in this field. The checks carried out by the agents stipulated in Article 25 of this law do not exempt the operator from the obligation to ensure product conformity before offering the product for consumption in accordance with the regulatory provisions in force)

To further ensure food safety, the Algerian legislator did not overlook the issue of food packaging, stressing the need for materials and equipment used for packaging food to be free of any contaminants. Executive Decree No. 04-210 was issued, specifying the methods for regulating the technical specifications of packaging and wrappers intended for the direct containment of food products and items intended for children's use, in order to guarantee their safety and health. Executive Decree No. 91-04 dated January 9, 1991, relating to substances intended to come into contact with food and cleaning preparations for these substances, was also issued in the Official Gazette No. 04 dated January 23, 1991 (Lakhdari, 2017, P419).

Executive Decree 91-04 emphasized the need to comply with technical specifications for the packaging of produced or prepared foods, whereby the operator must adhere to the following: (Lakhdari, 2017, P419).

- Packing the food in packaging or containers that are clean, pure, moisture-proof, sealed, and of sufficient capacity for the amount or quantity of the food being stored.
- Do not use containers or packaging that could result in an unacceptable change in the composition of the food product or damage to its permanent organic properties.
- Do not use containers or packaging that have previously come into contact with other food or non-food products.
- Newspaper should not be used as a substitute for packaging where the nature of the food product necessitates it.
- The food must be packaged in conditions that prevent any contamination, spoilage, deterioration, or growth of foreign germs in it.

Thirdly: Monitoring the Use of Food Additives to Ensure Food Safety.

The food industry has witnessed significant development, and the food market has expanded, leading to intense competition among food manufacturers. This has resulted in a growing demand for food additives to enhance food, whether for preservation, sweetening, coloring, or improving taste and appearance, etc.

A distinction must be made between food additives and food supplements. According to Article 3 of Executive Decree No. 12-214, a food supplement is defined as a concentrated source of the nutrients, either alone or in combination, marketed in the form of capsules, tablets, powder, or solution. It cannot be consumed as a regular food product, but can be consumed in small, sufficient quantities. Its purpose is to compensate for deficiencies in vitamins and/or minerals in the regular diet. Food supplements are consumed as a separate substance from the food product, unlike food additives, which are part of the food product (Achir, 2023, P1474).

Food additives pose a real threat to consumer health if their use standards are not respected. Therefore, several international bodies have worked to establish standards for the use and monitoring of food additives. This is particularly true in developed countries such as the United States and the United Kingdom, represented by the JECFA, and the US Food and

Drug Administration (FDA), which has set prerequisites for approving the use of food additives (Mahmoudi ,2023, PP 607-608).

The Algerian legislator did not overlook the importance of food additives to ensure safe food, as it adopted international standards and special conditions for their use through Executive Decree 12-214 dated May 15, 2012, which specifies the conditions and methods of using food additives in food products intended for human consumption. This decree specified the basic principles that define the conditions for using food additives, in order to preserve nutritional value, while specifying the list of authorized additives and their biological functions, the permissible limits, as well as their numbers in the International Numbering System, and specifying the types of food in which food additives are authorized to be incorporated, without overusing them.

The use of food additives is subject to the following conditions (Achir, Consumer Health from Food, 2023, P1474):

- A study of the food additive in terms of its composition and how it interacts with the human and animal body.
- Tests to ascertain the extent of the additive's effect on the human body.
- After confirming that the additive does not compromise safety, it is referred to a higher committee to study all theoretical and practical aspects of its effect on the human body.
- If it is proven that the additive does not harm the human body, or that its effects are limited, a memorandum is issued authorizing its use.
- These food additives must be halal, according to Article 90 of Executive Decree 12-214, in accordance with the principles of Islamic Sharia.

Fourthly: The Role of Food Safety Inspectors

Food safety inspection is a set of regulatory activities aimed at ensuring that various activities and their outcomes align with expectations and established standards. It comprises a set of methods used to verify that the produced goods conform to pre-defined specifications (Si Youssef,2015, p284).

To guarantee continuous, comprehensive, and effective food safety inspection at all stages of production and until it reaches the consumer, the Algerian legislator has appointed specialized food safety inspectors to oversee various types of food.

1/ The Role of Fraud Repression Agents in Food Safety Control

Fraud repression agents are affiliated with the Ministry of Commerce and are responsible for enforcing laws related to consumer protection and combating fraud in the field. The role of fraud repression agents is not limited to ministry employees but extends to several other entities, such as judicial police officers and agents, customs officials who exercise their authority in border areas, ports, and airports to monitor all imported foodstuffs and prevent the entry of unsafe products, and veterinarians who monitor all food products of animal origin, such as various meats, poultry, eggs, milk and dairy products, fish, and seafood. Given the multitude and diversity of these animal-based products, the Algerian legislator has established several regulatory legal texts for each product, including: the Joint Ministerial Decree dated 04 Safar 1416 AH (corresponding to June 2, 1995) concerning the release of slaughtered poultry for consumption, and the Joint Ministerial Decree dated 19 Shawwal 1417 AH (corresponding to February 26, 1997) concerning the conditions for preparing merguez sausage. Its marketing and the ministerial decree dated 19 Jumada II 1420 AH, corresponding

to September 29, 2003, concerning the conditions for preparing and placing minced meat for consumption.

Article 25 of Law No. 09-03 on Consumer Protection and Fraud repression defines the persons authorized to conduct investigations, stating that (in addition to judicial police officers and other agents authorized by their respective regulations, agents of the Fraud repression Department of the Ministry responsible for Consumer Protection are authorized to investigate and inspect violations of the provisions of this law).

These agents of the Fraud Suppression Department possess certain judicial police powers to investigate and inspect violations of the provisions of the Consumer Protection and Fraud Suppression Law. Their duties are defined by Executive Decree 09-415, which contains the special basic law applicable to employees belonging to the special corps of the administration responsible for trade (Messyad, 2021, P808).

To enable fraud prevention officers to perform their duties effectively, the Algerian legislator granted them broad powers that significantly contribute to consumer protection and ensure access to safe food.

These officers exercise their oversight by verifying that products conform to the required standards, as stipulated in Article 29 of Law 09-03.

Fraud repression officers can also examine documents, hear from those involved, conduct direct inspections, and take samples for necessary analyses.

The law authorises fraud repression officers, in the course of their duties, to request the examination of all documents, whether technical, administrative, commercial, financial, accounting, magnetic, or informational, as stipulated in Article 34 of Law 09-03.

Fraud repression officers have the right to enter commercial premises, offices, annexes, and shipping and storage facilities at any time, and they have the right to intervene during the transport of products, as stipulated in Article 34 of Law 09-03. They document all violations by inspecting and preparing a report that includes the identity and title of the officers who conducted the inspection, along with the dates and locations of the inspections. The report details the recorded facts and violations, and the corresponding penalties, in the presence of the party involved, who signs the report (Qunan, Kahina, 2021). If the party involved refuses to sign, this is recorded in the report. If fraud repression officers determine that food products are unsafe; They are entitled to take all precautionary measures, such as seizure, confiscation, and destruction, while issuing a violation report that is sent directly to the judicial authorities.

When carrying out their duties, fraud suppression officers are bound by professional confidentiality regarding any trade secrets they may uncover during inspections.

2/ The Role of Rapid Alert Networks in Food Safety Control

Rapid alert networks, in general, are a network of systems established to predict various risks before they occur, whether natural, health, or security disasters. This contributes to reducing the resulting human and economic damage. These networks rely on risk knowledge, monitoring and prediction, message dissemination, and response capabilities.

Their operation depends on risk awareness, surveillance and forecasting, communication, and response capacity. The Rapid Alert Network in the field of consumer protection is a network established within the Ministry responsible for consumer protection. It works to monitor products that pose a risk to consumer health. It is also considered a central body at the level of the Ministry of Commerce that carries out the task of tracking the product

(Belhourabi, 2024, P141) to detect any unsafe food product that may pose a risk to the consumer, and to take action regarding it. The Algerian legislator granted the Rapid Alert Network a set of powers through Executive Decree No. 12-203 relating to the rules applicable to product safety, the most important of which is the immediate broadcasting of any information that could lead to the immediate withdrawal from the market of any product that could harm the health or safety of the consumer (Belhourabi, 2024, P142).

3/ The Role of Consumer Protection Associations in Ensuring Safe Food

Consumer protection associations are non-governmental organizations, yet they play a vital role in guaranteeing the consumer's right to safe food. This is achieved through raising awareness, educating consumers, and informing them through various media outlets. Consumer protection associations also monitor price increases in the market and producers' compliance, particularly with strategic food items such as milk and bread. They also track cases of commercial fraud and ensure that goods offered for sale meet quality standards (Si Youssef 2015, P291).

. Furthermore, consumer protection associations receive various complaints from consumers regarding unsafe food products and submit reports to the relevant regulatory authorities.

Consumer protection associations are established as civil parties in lawsuits where the same party is responsible, as stipulated in Article 23 of Law 09-03.

4/ The Role of Hazard Analysis and Critical Control Points (HACCP) in Ensuring Food Safety.

Algeria has adopted the HACCP system, which aims to control biological, chemical, and material dangers that can render food unsafe. This is achieved through a set of procedures and measures designed to control food contamination risks at every stage of production.

This system originated in the United States in 1960 and was later adapted for the public sector by a company working for NASA that specializes in food production for astronauts. Algeria adopted it in 2017, making it mandatory through Executive Decree No. 17-140, dated 14 Rajab 1438 (corresponding to April 11, 2017), which specifies the hygiene and health requirements during the preparation of food products for human consumption.

The Algerian legislator defined the Hazard Analysis and Critical Control Points (HACCP) system as a set of written actions and procedures that are put in place at the level of establishments to assess risks and identify critical points that threaten hygiene and food safety in order to control them.

This system works to:

- Ensure consumer safety.
- Ensure food quality.
- Ensure hazard understanding and control.

This system is based on seven key stages:

- Risk Analysis: This stage identifies the probability of contamination occurring.
- Critical Point Identification: This identifies the most vulnerable points where contamination could occur.
- Critical Boundaries: This stage determines the time frame within which contamination could occur, for example, whether it will occur within 3 or 4 hours, or more or less.

- Monitoring Procedures: This stage involves ensuring that all food production personnel adhere to hygiene rules and procedures.
- Corrective Action: This is the process of making swift decisions to rectify any situation that could lead to food contamination.
- Verification Procedures: During this stage, the system's implementation is verified through product monitoring.
- Documentation and Recording: This refers to the commitment to documenting, writing down, and posting all rules, measures, and procedures for implementation.

5/ The Role of Artificial Intelligence in Ensuring Safe Food

Artificial intelligence (AI) has become a tool for developing all aspects of life, including food security and consumer protection.

Artificial intelligence is a significant scientific and technological development that can contribute to achieving the Sustainable Development Goals and ensuring sufficient and sustainable food availability for all by overcoming the technical, knowledge-based, and political challenges. It can also be an effective tool for enhancing food security and balancing increasing food needs with limited resources (Khalifi, 2024, P111).

The arising of what it is known as smart agriculture, through developing the agricultural sector by integrating information and communication technologies, computing, and data analysis, which allows for the analysis of surrounding environmental conditions and geographic information systems, optimizing water and fertilizer use, and reducing waste in agricultural production (Siari, 2029, P38).

This shows that artificial intelligence contributes to enhancing food security on the one hand, and supports consumer protection on the other. Digital transformation has become a legal and regulatory tool that can support other legal mechanisms in performing their tasks, such as developing and facilitating the work of fraud repression agents by utilizing smart digital laboratories and rapid instant tests, and utilizing smart software to detect counterfeiting in labelling and advertising. Artificial intelligence can also support the work of rapid warning networks by using rapid data analysis and the use of algorithms.

Conclusion:

In conclusion, this research paper reveals that the consumer's right to safe food is not merely a social or ethical request, but a legal right that every state is indebted to sustain towards its citizens. This obligation is fulfilled through the enactment of laws and regulations related to consumer protection. The Algerian legislator has adopted this approach by issuing Law 09-03 concerning consumer protection and the repression of fraud, along with various implementing decrees. Furthermore, the government relies on various oversight devices, such as fraud repression agents and rapid alert networks, while simultaneously strengthening the role of consumer protection associations in raising consumer awareness of their right to safe food. Modern monitoring systems, including Hazard Analysis and Critical Control Points (HACCP), have also been adopted.

Despite all the legal texts, mechanisms, and institutions deployed by the Algerian legislator to guarantee the consumer's right to safe food, the risks associated with unsafe food, particularly processed foods, continue to increase significantly. This necessitates greater efforts and increased involvement from all investors.

Results:

- The concept of safe food is entirely distinct from food security. The former is health-related, while the latter is economic; both are complementary concepts.
- Safe food is food free from various contaminants, whether biological, chemical, or otherwise, that contaminate food and render it unsafe, posing a risk to the health and lives of consumers.
- Fraud suppression agents are an executive mechanism for consumer protection, possessing broad powers granted to them by the Algerian legislator to guarantee the consumer's right to safe food.
- Rapid alert networks contribute to monitoring food safety and detecting any risk that makes it unsafe, enabling preventive measures such as recall and prohibition.
- Artificial intelligence is considered a digital monitoring mechanism that can effectively contribute to consumer protection and ensure their right to safe food.

Recommendations:

- The need to update current legal texts to address the risks of industrially processed foods.
- Supporting fraud repression agents with modern technological means, such as mobile laboratories that can quickly detect contaminants on-site, to facilitate swift seizure procedures.
- Implementing a precise traceability system that all investors in the food industry must adhere to, to document all stages of food processing, thus facilitating the rapid identification and recall of contaminated and unsafe foods.
- Artificial intelligence is considered a digital monitoring mechanism that can effectively contribute to consumer protection and ensure their right to safe food.
- Consumer protection associations play an important role in spreading consumer awareness, which contributes greatly to protecting the consumer and educating him about his right to safe food.

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