1. Introduction
An emerging trend in modern culture, particularly in industrialized nations, is the growing concern for consumer protection. More emphasis is now being placed on protecting consumers in keeping with the growing emphasis on protecting human rights, as opposed to the past when producers—perceived as crucial to the growth of the nation's economy—received more attention. Furthermore, as they are not engaged in the economic turnover on a professional basis, consumers are the less powerful party in the transaction. As a result, the law provides greater protection than in the past. For this reason, the issue of product liability has attracted increasing attention from industry, consumers, merchants, the insurance industry, the government, and legal experts.

The activities of producers in economic development are one of the steps in national development, but until now, although it has produced various advances, the welfare of citizens is still far from the ideal to realize a strong economy and the welfare of all levels
of society\(^3\). Furthermore, National economic development in the modern era must be compatible with corporate expansion in order to manufacture a wide range of technologically advanced goods that can enhance the quality of life for many people while simultaneously ensuring that consumers are not harmed by the uncertainties inherent in international trade. The expansion of cross-border trade is facilitated by globalization and free trade\(^4\). The public good and assurances about the amount, quality, and safety of commodities purchased from the market must be guaranteed when the national market is opened up as a consequence of economic globalization. Consequently, in order to elevate customers' dignity, it is critical to cultivate the mindset of accountable corporate actors and to raise consumers' levels of self-awareness, education, concern, competence, and autonomy in protecting themselves. Based on such a proposition, a law that can protect consumers’ interests need to be effectively implemented\(^5\).

Numerous goods and services are available to consumers today as a direct outcome of economic growth, particularly in the areas of manufacturing and international trade. Furthermore, the space for transaction flows of goods and services across a country’s borders has expanded due to globalization, free trade, and advancements in telecommunications and information technology. As a result, the goods and services offered vary, including both domestic and foreign products. This problem has been accelerated by communication and transportation technology advances, making cross-border transactions easier than those at the retail or consumer level\(^6\). Consumers have an important position in the free trade order\(^7\).

A very recent development in the law is the commercial sale of genetically engineered foods. These foods have implications for both consumer and producer responsibility in terms of food safety. The majority of people who purchase genetically modified food do not give it any thought before making the purchase. The significance of consumer protection laws and the legal obligation of food manufacturers of genetically modified foods are further considerations in light of the international commerce of genetically modified foods. Giesela Ruhl stated: “Cross-border consumer transactions are one of the most frequent transactions in the world”\(^8\).

Research on genetically modified crops began at the LIPI Biotechnology Center in 1997 with the development of insect pest-resistant rice. In 1973, Stanley Cohen and Herbert Boyer obtained, for the first time, recombinant DNA, starting the era of genetic engineering\(^9\). Not long after, BB Biogen developed rice, corn, and soybean from biotech cassava that is resistant to pests and diseases. In collaboration with Baliita Lembang, BB Biogen developed rot-resistant papaya. While IPB developed a number of horticultural products, peanuts, soybeans, and potatoes, from biotechnology chilies that are resistant to diseases caused by viruses. The Bogor Plantation Crops Research Center also developed coffee, cocoa, and sugarcane from biotech palm oil\(^10\). The most frequently transformed plants include soybean and maize\(^11\).

Regulations for the release of GMO crops began in 1997 following the issuance of the Minister of Agriculture’s Decree on Genetically Engineered Agricultural Products. This regulation was upgraded to a Joint Decree (SKB) of four ministers in 1999. Following the SKB, the Biosafety and Food Safety Commission (KKHKP) was established as the selection team for genetically modified products. KKHKP has cleared Bt cotton, soybeans, and biotech corn for commercial use. From the livestock sector, two enzyme products, namely Rhonozime and Phytase as additive components, were authorized for circulation in 2002 and 2003. All are imported products.

Apart from that, it is interesting to examine the responsibility of food producers of genetically modified products in enhancing economic growth and realizing real welfare improvement while reducing the lag of other more developed countries in the framework of support for economic development.

Regulation of the responsibility of food producers of genetically modified products is one form of national legal development, in the sense that legal provisions related to modified organisms from modern biotechnology need to be integrated into national legal provisions to renew the national legal system. This is so that it can help hold companies accountable and ensure that

---


\(^5\) Yuanitasari.


\(^8\) Matnuh, “Rectifying Consumer Protection Law and Establishing of a Consumer Court in Indonesia.”


\(^11\) Kramkowska, Grzelak, and Czyzewska, “Benefits and Risks Associated with Genetically Modified Food Products.”
customers’ rights when it comes to eating genetically modified foods are protected by law. In light of the foregoing, the primary objective of this study is to determine the role that Indonesian producers of genetically modified food products play in the country’s economic growth.

2. Research Methods
This research aims to find out how the responsibility of producers in Indonesia is related to the development of the national economy. The research is also directed at finding and developing the participation of producers in the implementation of their responsibilities from the perspective of national development in the economic sector. This research uses a normative juridical approach. Normative legal research is conducted by examining library materials or secondary data, including primary, secondary, and tertiary materials.12 Normative legal research is carried out through the steps of inventorying positive law, finding legal principles, and finding law concrēto.13 Researchers realize that research that only relies on secondary data is less supportive in drawing an adequate and accurate conclusion based on scientific principles or rules that can be academically accounted for. Therefore, researchers make efforts to find data derived from field research to complement existing literature data. This research is descriptive analytical research, namely research based on written legal sources related to producer responsibility as a form of producer participation in national economic development. The analytical descriptive method aims to obtain a comprehensive and systematic description through a critical analytical process of various relevant regulations. The data that has been obtained and collected is analyzed qualitatively without using mathematical formulas.

3. Result and Discussion
3.1 Liability of Producers of Genetically Engineered Food Products for Consumer Harms
Chapter VI of Law No. 7/2012, in conjunction with Law No. 18/2012 on Food,14 specifically regulates the food industry’s responsibility. Article 41 states that a business entity that produces processed food for distribution or an individual within the business entity who is given responsibility for the operation of the business is responsible for the safety of the food it produces for the health of others who consume the food (paragraph 1).

Furthermore, paragraph (2) of the article states that an individual whose health is impaired or the heirs of an individual who dies as a direct result of consuming processed food in circulation is entitled to file a lawsuit for compensation against the business entity and or individual in the business entity, as referred to in paragraph 1.

The next paragraphs (paragraph 3 and paragraph 4) explain the obligations and rights of business entities and/or individuals if the processed food in circulation is proven or not proven to contain ingredients that may harm or endanger human health or contain other prohibited ingredients.

The rights and responsibilities of customers, business entities, and individuals inside business entities are governed under Chapter VI, namely Articles 42 and 43. Whoever distributes or imports food into Indonesian territory will be subject to the rules of Article 41 paragraph (3) and paragraph (5) if the party mentioned in Article 41 paragraph (1) is unknown or not domiciled in Indonesia, as stated in Article 42. Additionally, according to Article 43 (1) and paragraph (2), the Indonesian government has the authority to sue for compensation on behalf of those who have suffered a loss or disaster if the amount of material loss is substantial or if there are many victims.

The need to regulate these rights and obligations is understandable because, at the time the law was enacted, the arrangements mentioned above had not been properly established. In 1999, the House of Representatives approved the Draft Law on Consumer Protection, and the Government passed it into Law No. 8 of 1999 on Consumer Protection.15 Therefore, implementing Articles 41-44 of Law No. 7/1996 would more appropriately fall under the area of consumer protection implementing regulations.

The potential for cross-border food transaction flows has grown thanks to globalization, free trade, and advancements in information and communication technologies. From birth to death, human life (including Indonesian life) is dominated by corporations, which produce, among others, foodstuffs consumed by the public. The process of introducing genetically modified food to consumer markets is preceded by a detailed technological and toxicological analysis aimed at the evaluation of safety and its use. The process of introducing genetically modified foods to the consumer market is preceded by detailed

---

technological and toxicological analyses aimed at evaluating the safety associated with their use. The most widely used means of consumer law in the European Union is to oblige suppliers to reveal certain information to consumers. Consumers’ expectations are thereby eventually met as all information is disclosed voluntarily except for the most unfavorable news.

The reform that gained momentum in mid-1997 or 1998 requires government administrators to carry out good governance and all stakeholders to do the same. In terms of corporate activities, good corporate governance is required. Therefore, the public also has the right to know whether what is done by a corporation has met certain standards of activity or is contrary to the law. This is where good corporate governance is important. How do we explain these rights to the wider community? This is where the role of the government is important, as it regularly provides advocacy and socialization on the importance of good corporate governance.

The responsibility to provide balanced and non-misleading information in marketing its food products. This responsibility is part of the implementation of good corporate governance, where information is a strategic aspect. Government regulations on labels and advertisements, among others, are also intended to ensure the honesty of this information. In European Union countries, genetically modified food is required to fulfill respective legal Acts, among them Directive 1829/2003/WE on genetically modified food and fodder. However, technological developments have resulted in the need to rethink the meaning of products and their labeling. The introduction of genetically modified components for general use is linked to the obligation of their appropriate labelling. For example, soybeans produced from genetic engineering are still called soybeans or not soybeans. If you only look at the physical appearance, the answer may be soybean, but if you limit the definition of soybean to its DNA structure, the answer is certainly not soybean. Moreover, potatoes, tomatoes, cotton, and tobacco used to be subjected to the process of transgenesis, and among animals, species such as cattle and pigs

The most sensitive examples for Indonesians are those related to halal and haram. For example, if a cow is genetically modified with pig genes, resulting in a cow that breeds a lot and quickly, two very crucial issues arise first: whether the engineered animal is called a cow or a pig. As a consequence, whether the animal is halal or haram. Indonesia is a country that has the largest number of Muslims in the world; approximately 80% of the population adheres to Islam. The lack of a complete law on the issue of Halal has made the enforcement of existing laws ineffective.

Basically, communities also have rights and obligations to protect themselves and their groups from various external actions that threaten their existence and culture (including food culture/patterns). Experience so far shows that the enforcement of these rights and obligations is very weak; therefore, the enforcement of these rights and obligations requires the prerequisite of consistent law enforcement, which is not only carried out by the government but also by the community. Therefore, the government, together with the community, must encourage and provide conducive conditions for every member of the community to be able to fulfill their food in a dignified and sustainable manner so as not to place an increasingly heavy burden on the government and the community.

The producer’s responsibility essentially includes the protection of consumers so that the losses suffered by consumers are appropriate if the strict liability principle is applied to producers. The principle of absolute liability is usually known as “strict liability” or “absolute liability,” where faults are no longer necessary in proving losses. Although theoretically and practically, it is difficult to distinguish strictly between the two terms, there are basic differences between the two. In Strict liability, the act that causes the claimed loss must be committed by the person responsible. In other words, there is a causal relationship between the person who

---

16 Kramkowska, Grzelak, and Czyzewska, “Benefits and Risks Associated with Genetically Modified Food Products.”
19 Kramkowska, Grzelak, and Czyzewska, “Benefits and Risks Associated with Genetically Modified Food Products.”
20 Kramkowska, Grzelak, and Czyzewska.
21 Kramkowska, Grzelak, and Czyzewska.
is actually responsible and the loss that occurs. All the usual defenses are recognized except those that lead to the absence of fault, as the fault is no longer required.

Whereas “absolute liability” will arise whenever the circumstances that give rise to the responsibility exist without regard to who or how the loss occurred. The existence of a causal relationship between the person liable and the loss is not required. In this case, unless expressly stated, factors that would normally excuse escape from liability do not apply. In other words, there are no exemptions from liability except where expressly stated 26.

3.2 Producer Responsibility of Genetically Engineered Products as a Basis for Indonesian Economic Development

Food is a primary need that must be fulfilled since it is not only about how to get it but also starts with the ingredients, process, and how the food is made 27. In correlation to conventional transactions, Law No. 8/1999 on Consumer Protection or GCPL was born by declaring rights and obligations between consumers and business actors, mainly to protect consumers 28. However, the presence of the GCPL still leaves a difference of view regarding a relatively new legal institution, namely strict liability, which is not explicitly stated in the Law 29. The different views are actually related to the juridical construction contained therein. Although referred to by the same term, according to the history of its development, strict liability in the Civil Law System has different roots from strict liability in the Common Law System. The main purpose of this law is to maintain business actor behavior by creating limitations and avoiding losses 30. Understanding the juridical construction will help every business understand and implement the provisions of Chapter IV on Business Responsibility, especially Article 19 paragraph (1) jo Article 28 of GCPL for the protection of consumers 31.

In many countries, the presence of producer responsibility law is driven by the fact that the principles in contract law and tort law, which were developed before or at the time of the Industrial Revolution in Europe, are no longer adequate to resolve global trade issues. With the development of industry supported by technological advances in all fields, the potential for losses caused by goods produced by factories is greater than before. The existing policy shows a concern that product liability law is expected to “destroy” nascent industries when consumers hold them liable.

In many countries, including Indonesia, product liability law is developed non-uniformly. Some construct it as: first, the principle of liability based on no fault; second, the rebuttable presumption of liability principle; and third, the strict liability principle. This is what then raises debate among legal scholars so that there is a view that what is contained in the GCPL, especially Article 19 paragraph (1) jo Article 28, is appropriate, and there is also another view that the formulation of these articles is not appropriate because the product liability law referred to by the two articles still relies on the element of fault. Meanwhile, the obligation to prove the fault of the business actor by the consumer is not easy because of the gap in both economic ability and knowledge between the parties.

Which view is more appropriate to the conditions and demands of the needs in Indonesia where, on the one hand, the situation itself is needed, and on the other hand, the consumer’s interests are protected? To answer these problems, one way to obtain answers to the problems that have been raised is to conduct a review of the development of product liability law, especially product liability law, within the framework of the Civil Code (BW).

Responsibility is an Indonesian word that has been commonly used in society as well as among legal experts - theorists and practitioners for the notion of what is termed “responsibility” or “verantwoordelijkheid,” or “liability” or “aansprakelijkheid” 32. Considering the term responsibility, then, of course, there are legal rules that regulate the problem. The term aansprakelijkheid recht is often found in Dutch literature to refer to the law governing responsibility.
if the term is traced in the Indonesian literature, a conclusion will be obtained that almost no Indonesian writers use the term law of responsibility in discussing the substance of civil law. Especially civil liability. It seems that the Indonesian Civil Code’s systematics influence these authors, so the discussion of civil liability always focuses on the terminology of ties as stipulated in Book III of the Civil Code. With such a starting point, the main topics that always get more attention to be discussed are agreements and unlawful acts, which have been accepted as sources of engagement.

Based on the conventional view, it can be seen that liability is only possible if there is a legal relationship between the parties, whether the legal relationship is born due to an agreement or an illegal act. This is reflected in the principle of no privity-no liability, which means that if there is no agreement/contract and thus no legal relationship, then there can be no liability.

Dynamics, changes, and developments in society also occur. Industrial development supported by technological advances has brought changes to the pattern of production, distribution, and consumption. If the problem of liability can initially be solved by the rules of the law of ties both from agreements and tort, then with these changes, many problems cannot be solved by these rules, especially when related to consumer interests.

Every time a product is released to the market, it can be enjoyed by anyone regardless of whether he or she obtained it through a certain agreement that creates a legal relationship or without any direct legal relationship with the seller or the party who produced it. Concretely, if a person acquires an item through a sale and purchase agreement and it turns out that the item is defective so that it causes him harm, it is not difficult for him to ask for a product liability. However, if a person suffers losses due to consuming a product, as happened in the Thalidomide case (Softenon case), as can be found in Gregor van den Burght’s article entitled “The European Directive on Products Liability” (1994). Johannes Gunawan also cited the Thalidomide case in his inaugural speech as Professor of Unpar Bandung. The Softenon case, known in Japan and the United States as Thalidomide, was a case of a drug used during pregnancy. Pregnant women who took the drug were found to give birth to babies with birth defects. Against such cases, there will certainly be some obstacles to applying tortious liability in compensation cases due to defective products. It has been alleged that there are around 8,000 babies who have birth defects and are spread over 30 countries, 450 of which are in the U.K.31.

In a nutshell, according to Johannes Gunawan’s writings, the idea of strict liability first emerged in product liability cases, where the seller is held financially responsible for any and all products that pose a significant risk to consumers’ health or safety due to defects or other issues. The original formulation was as follows. A concept applied by the courts in product liability cases in which a seller is liable for any and all defective or hazardous products that unduly threaten a consumer’s safety 34. Furthermore, in 1991, Black’s Law Dictionary, Abridged Sixth Edition changed the formulation of strict liability with the addition of the phrase “liability without fault”. The full formulation is: “liability without fault, a concept applied by the courts in product liability cases in which a seller is liable for any and all defective or hazardous products which unduly threaten a consumer’s personal safety”. Thus, it can be concluded that product liability was originally the concept of liability based on risk, namely losses arising from the risk of threatening consumer safety due to consuming defective or dangerous products.

The 1999 revision highlights the fact that, contrary to tort law, which is based on actual carelessness or malicious intent, strict liability is based on the violation of an inherent obligation to ensure the safety of an item that is inherent in all contracts between businesses and their customers. Consequently, the element of negligence is not necessary for the business actor to be held liable in product liability as it is founded on an agreement. Therefore, there is an assertion that strict liability is also referred to as liability without fault. With such a construction, it is impossible to reverse proof the element of fault because there is absolutely no element of fault as one of its elements 35.

In addition, there is another assertion that in “product liability”, strict liability is different from negligence. This means that the theory of producer liability is liability without fault for losses caused by defective products. Strict liability exists to reduce the burden on the injured party to prove that the manufacturer who has produced a product and caused harm was negligent.

It is clear now that although the term used in both the Civil law system and the Common law system is the same, namely strict liability, the juridical construction is different, as can be seen from the origin of its presence. In connection with that, product liability, as has been implicitly introduced by Law No. 8 of 1999, especially if we pay close attention to the formulation of Article 19 paragraph (1) jo Article 28, has actually also introduced the concept of strict liability as a derivation of tortious liability. Therefore,

35 Gunawan, “Kontroversi Strict Liability Dalam Hukum Perlindungan Konsumen.”
it would not be appropriate if strict liability in Law No. 8/1999 is interpreted as liability without fault. The formulation of Article 19(1) and Article 28 of the GCPL will be quoted below: Article 19 (1) states that “business actors are responsible for providing compensation for damage, pollution, and/or loss to consumers due to consumption of goods and/or services produced or traded”. In other words, producers as business actors have an obligation to compensate consumers in the event that they incur losses as a result of damage, pollution, or financial and health-related issues as a result of eating the product that is being traded. Additionally, it is the obligation and responsibility of the business actor to prove, according to Article 28, if there is an element of fault in the compensation claim mentioned in Articles 19, 22, and 23, except that his liability should always be based on the strict principle (no derogation from fault-based liability). With this formulation, it can be concluded that the concept of producer responsibility is not explicitly regulated in the GCPL because the two articles are under Chapter VI on the Responsibility of Business Actors, which means that they emphasize business actors rather than products.

The increasing number of transgenic food products on the food market induces the belief that genetic modification of plants and animals provides profits. On the other hand, it also has an obligation to protect consumers. From there, it can be concluded that the selection of such strict liability construction seems to be the right way out for now, both for the sake of protecting consumers who are truly harmed by consuming a product and for the sake of protecting our industry so that it does not fall under too heavy a burden. Meanwhile, the concept of producer liability has not been fully accepted by the industry, so the need to develop a series of security measures when there are defective products that cause losses, such as the establishment of a defective product accident fund or product insurance, has not received a significant response from the producer industry and the insurance industry. The advantage of using product liability insurance for producers is that insurance companies pay consumer compensation claims. Meanwhile, the insurer will guarantee and pay for consumer losses.

Based on the discussion, it can be concluded that although the GCPL does not explicitly mention the term strict liability, it does not mean that the GCPL has not taken over the concept. It is just that the concept of strict liability in the civil law system is a derivation of tortious liability which is essentially liability based on fault, so strict liability in this sense is not appropriate if it is referred to as no fault liability/liability based on fault/liability without fault. This choice seems to be based on the consideration that there needs to be protection for consumers on the one hand and some kind of protection for industries, especially infant industries, within the framework of economic development in Indonesia.

Based on Law No. 17/2007 on the Long-Term Development Plan 2005-2025, the Indonesian economy is developed by strengthening the domestic economy and is globally oriented and competitive. For this reason, a gradual transformation is carried out from an economy based on comparative advantages of natural resources to an economy with competitive advantages. Based on the principle of economic democracy, which considers the national interest to guarantee business and work opportunities for all people and encourage the achievement of poverty reduction. Economic institutions are developed in accordance with the dynamics of economic progress by applying the principles of good governance in preparing an efficient, effective, and non-discriminatory regulatory and licensing framework; maintaining, developing, and implementing a climate of healthy business competition and protecting consumers; encouraging the development of product and service standardization to increase competitiveness; formulating technology development strategies and policies in accordance with national economic development; and increasing the competitiveness of small and medium enterprises (SMEs) in various regions of Indonesia so that they become an integral part of overall economic activity and strengthen the domestic economic base.

The term “economic development” refers to a coordinated set of measures taken by an economy to improve its infrastructure, business climate, educational attainment, and technological prowess. As an implication of these developments, it is expected that employment opportunities, income levels, and society’s prosperity will increase. Food safety, problems, and impacts of quality deviations, as well as strengths, weaknesses, opportunities, and threats in the development of food industry quality systems, are the shared responsibility of the government, industry, and consumers, who must now begin to anticipate them with the implementation of food quality systems. Because in this free market era, the Indonesian food industry inevitably has to be able to compete with the rapid inflow of food industry products from other countries that have established their quality systems.

The elimination of access to unhealthy food is a hallmark of food security, one of the food sector’s development goals. There has been an obvious attempt to shield the public from foods that do not adhere to health regulations. By raising producers’

---

36 Pemerintah Pusat, Undang-Undang Nomor 8 Tahun 1999 Tentang Perlindungan Konsumen.
37 Nizioł, “The Challenges of Consumer Protection Law Connected with the Development of Artificial Intelligence on the Example of Financial Services (Chosen Legal Aspects).”
38 Kramkowska, Grzela, and Czyzewska, “Benefits and Risks Associated with Genetically Modified Food Products.”
understanding of food quality and safety, the food safety program hopes to protect the public from potentially dangerous foods. It also hopes to strengthen food institutions by establishing rules and regulations to ensure food is safe to eat, and it hopes to see more food industries comply with these rules and regulations.

In an effort to safeguard both consumers and producers of wholesome, safe, and halal food, the government has taken a step ahead with Food Law No. 18/2012 and Law No. 7/1996. Government Regulation No. 28/2004 on Food Safety, Quality, and Nutrition and Government Regulation No. 69/1999 on Food Labeling and Advertising were issued with the aim of providing further detail to the Food Law. Government Regulation No. 21/2005 on Biosafety of Genetically Engineered Products was also issued in 2005 to implement Article 8 paragraph (2) letter b and paragraph (3) of Law No. 32/2009 on the Environment. 41

The tiny percentage of customers who demand that producers provide safe and quality food items and the consumer claims that occur when purchased food goods do not match the information listed on labels and marketing demonstrates the lack of consumer knowledge and concern about food safety. Producers’ attempts to enhance food safety education will be substantially bolstered by consumers’ high levels of knowledge and awareness.

4. Conclusion
Due to producers’ superior economic standing, the duty of genetically modified food producers towards consumer losses has failed to meet the criterion of justice. Therefore, in order to achieve justice, the application of the principle of strict liability will safeguard and bolster the position of consumers of genetically modified food items. The application of the idea of severe liability in the law on producer responsibility will encourage cautious behavior among food producers of genetically modified items, ensuring that the quality of their products is maintained. Good product quality can fulfill consumer needs for food, grow economic activities, expand employment opportunities, and increase the level of community income to support Indonesia’s economic development. Regulations regarding the responsibility of food producers of genetically modified products need to be made immediately to complement the GCPL as a legal umbrella in providing legal protection for consumers of genetically modified food products.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Publisher’s Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References