# **CHAPTER I**

#### INTRODUCTION

# 1.1 The Background of Study

The current rapid economic development was certainly driven by various aspects of the country's economy, one of which is a company that was engaged in many industries, whether food, clothing, or shelter. The development of the business world is now certainly inseparable from the regulations that bind it. Apart from the financial aspect, a company must pay attention to the social aspect, and the environmental aspect called the triple buttom line.<sup>1</sup>

The triple bottom line concept focuses on economic prosperity, environmental quality, and social justice. This concept is useful for balancing the economic, environmental, and social aspects of a company.<sup>2</sup> The balance between these three elements can elevate a company's image, reputation, finances, product quality, and good service.<sup>3</sup>

Bandung is known as one of the creative cities in Indonesia that not only attracts tourists with its natural and cultural beauty, but also with a variety of culinary specialities that illustrate the rich tradition and innovation of its people in culinary potential, including processed soy-based products such as tofu. The tofu industry in Bandung is growing rapidly, both on a household scale and in small and medium-sized industries, making tofu one of the typical products often found in traditional markets to souvenir centres.<sup>4</sup>

Bandung is not only famous for its tofu production, but also for its innovation and creativity in creating tofu-based derivative products, such as milk tofu, crispy tofu, and spicy tofu that are often used as popular snacks. One

<sup>&</sup>lt;sup>1</sup> Irvan Maulana Muzakynur, "Implementasi Corporate Social Responsibility(Csr) Untuk Pelestarian Lingkungan Hidup Terhadap Pemanfaatan Limbah Industri Perspektif Uu No 32 Tahun 2009 Dan Fiqh Al-Bi'Ah" (Universitas Islam Negeri Maulana Malik Ibrahim, 2021): 5.

<sup>&</sup>lt;sup>2</sup> Muhamad Zainudin, "Penerapan Corporate Social Responsibility Pada Pengelolaan Limbah Pabrik Tahu Barokah Di Geger Madiun" (Institut Agama Islam Negeri Ponorogo, 2024): 9.

<sup>&</sup>lt;sup>3</sup> Nur Fatwa Basar, Fajri Hamzah, and Nur Aisyah, "Penerapan Konsep Triple Bottom Line Pada Usaha Ayam Potong UD," Jurnal Akuntansi Kompetif 6, no. 1 (2023): 7.

<sup>&</sup>lt;sup>4</sup> Kiki Oktaliani, "*Infografis Bandung Jadi Kota Dengan Kuliner Terbaik*," iNews.id, 2023, https://www.inews.id/multimedia/infografis/infografis-bandung-jadi-kota-dengan-kulinerterbaik.

of the most famous tofu-producing areas in Bandung is the area around Cibuntu, Bandung Kulon District. In this area, many local entrepreneurs run tofu-making businesses, including the NJ tofu factory, which has been operating for several years and become one of the tofu suppliers for the consumption of the people of Bandung and surrounding areas.

As a business in fulfilling needs, these companies certainly have results or outputs from their production. Islam always encourages progress in various fields, including production. Therefore, production activities should not be separated from Islamic values.<sup>5</sup> The Prophet exemplifies the ethics of being a producer who adheres to the Islamic concept of prioritising the value of the quality of goods, and morals that make the production process not limited to the search for profit alone.<sup>6</sup>

Islamic business ethics are morals that regulate so that all business activities run in accordance with Islamic values.<sup>7</sup> Production activities that are not accompanied by Islamic values will create environmental damage, exploitation of natural resources, and can even lead to a capitalist economic system. In addition, production activities must create a balance between material and moral values.<sup>8</sup> This can be seen from how a producer protects and preserves the surrounding environment.

In Law No. 32 of 2009 concerning Environmental Protection and Management Chapter 1 Article 1 paragraph 14 explains that "Environmental pollution is the entry or inclusion of living things, substances, energy and / or other components into the environment by human activities so that it exceeds the established environmental quality standards".

<sup>6</sup> Ahmad Suminto, "Etika Kegiatan Produksi: Perspektif Etika Bisnis Islam," Islamic Economics Journal 6, no. 1 (2020): 12.

<sup>&</sup>lt;sup>5</sup> Fatma Wati Poernomo, Muhammad Iqbal Fasa, and Suharto, "*Analisis Pemanfaatan Etika Bisnis Islam Dalam Kegiatan Produksi*," Jurnal Keislaman, Kemasyarakatan Dan Kebudayaan 22, no. 2 (2021): 17.

<sup>&</sup>lt;sup>7</sup> Sugeng Nugroho Hadi and Salihah Khairawati, "Analisis Implementasi Manajemen Persediaan Bahan Baku Pada Industri Kuliner Dalam Perspektif Etika Bisnis Islam," Manajemen Dan Bisnis 17, no. 2 (2020): 59.

<sup>&</sup>lt;sup>8</sup> Agus Alimuddin, "*Etika Produksi Dalam Pandangan Maqasid Syari'ah*," Nizham 8, no. 1 (2020): 114.

<sup>&</sup>lt;sup>9</sup> Badan Pusat Statistik, "Undang-Undang Republik Indonesia Nomor 32 Tahun 2009," 2009.

Therefore, it is important for a company to be able to carry out its social and environmental obligations. This is indirectly contained in Law No. 40 of 2007 concerning Limited Liability Companies Article 1 Paragraph 3 which reads "Social and environmental responsibility is the company's commitment to participate in sustainable economic development in order to improve the quality of life and the environment that is beneficial both for the company itself, the local community, and society in general."

The environment according to Law Number 32 of 2009 is a unity of space with all objects, forces, conditions, and living things, including humans and their behaviour, which affect nature itself, the continuity of life, and the welfare of humans and other living things. in addition, the environment can also be understood as a unity of space in which there are various things that have dependence on each other. either nature with humans or humans with nature.<sup>11</sup>

As a food that can be processed easily, tofu is often the main solution in a dish. The number of people who love tofu, can be an opportunity for the birth of new tofu producers. This will certainly have an impact on environmental issues as well, given that tofu has a very disturbing production waste. Waste generated from the tofu manufacturing process can be in the form of liquid waste and solid waste.<sup>12</sup>

In this case, Islam also put more attention to the environment which was contained in fiqh ecology. Fiqh ecology or fiqh bi'ah in Arabic is all the knowledge and regulations of Islamic law or sharia regarding all human actions and behaviour concerning environmental issues. <sup>13</sup> The purpose of the creation of man is as khalifah on this earth. This means that humans were given

<sup>11</sup> Fuad Riyadi and Faiqul Riyan Anggara, "*Perlindungan Dan Pengelolaan Lingkungan Hidup Oleh Pemerintah Daerah Kudus Perspektif Fiqh Bi'ah*," YUDISIA: Jurnal Pemikiran Hukum Dan Hukum Islam 13, no. 1 (2022): 20.

<sup>&</sup>lt;sup>10</sup> Badan Pusat Statistik, "Undang-Undang Republik Indonesia Nomor 40 Tahun 2007," 2007.

<sup>&</sup>lt;sup>12</sup> Febrian Sayow et al., "Analisis Kandungan Limbah Industri Tahu Dan Tempe Rahayu Di Kelurahan Uner Kecamatan Kawangkoan Kabupaten Minahasa," Agri-Sosioekonomi 16, no. 2 (2020): 24.

<sup>13</sup> Riyadi and Anggara, "Perlindungan Dan Pengelolaan Lingkungan Hidup Oleh Pemerintah Daerah Kudus Perspektif Fiqh Bi'ah," YUDISIA: Jurnal Pemikiran Hukum Dan Hukum Islam 13, no. 1 (2022): 24

responsibility for everything on this earth, especially regarding the environment they live in.<sup>14</sup>

Fiqh ecology was also a branch of Islamic muamalah that regulated the relationship between humans and their God, humans and their neighbours, and even humans and the environment. The close relationship between religion, humans, and the environment certainly resulted in consequences for humans to reciprocate in the form of obligations in the maintenance and preservation of the environment.<sup>15</sup> The development and application of fiqh ecology teachings is a solution to the current environmental crisis which is caused by human greed.<sup>16</sup>

The concept of fiqh ecology involved an understanding of how Islam views the importance of protecting and preserving the environment.<sup>17</sup> This teaches how Islam can be a guide in protecting and preserving the environment, especially in the discussion of Islamic business ethics in its production activities.

This research has significant importance in the context of tofu industry waste management, especially regarding the environmental impacts. Tofu waste generated by factories is often disposed of without adequate treatment, causing soil and water pollution that can be detrimental to public health and local ecosystems. By analysing waste management from the perspective of environmental fiqh, this research not only provides practical solutions to mitigate these negative impacts, but also educates industry players about their moral and ethical responsibilities in protecting the environment in accordance with Islamic principles.

Ahmad Tijanul Uluum and Aji Nugroho, "Fikih Ekologi: Menjaga Kelestarian Lingkungan Alam Dengan Pendekatan Teori Maqhasidus Syariah," Universitas Islam Tribakti Lirboyo Kediri, (2023): 17.

<sup>15</sup> Riyadi and Anggara, "Perlindungan Dan Pengelolaan Lingkungan Hidup Oleh Pemerintah Daerah Kudus Perspektif Fiqh Bi'ah." YUDISIA: Jurnal Pemikiran Hukum Dan Hukum Islam 13, no. 1 (2022): 26.

<sup>&</sup>lt;sup>16</sup> Uluum and Nugroho, "Fikih Ekologi: Menjaga Kelestarian Lingkungan Alam Dengan Pendekatan Teori Maqhasidus Syariah." Universitas Islam Tribakti Lirboyo Kediri, 2023, p. 170

<sup>&</sup>lt;sup>17</sup> Ali Mutakin and Waheeda binti H. Abdul Rahman, "Fiqh Ekologi; Upaya Merawat Lingkungan Hidup Berbasis Konsep Maqashid Syariah," Syariah: Journal of Fiqh Studies 1, no. 2 (2023): 111.

In addition, the results of this study are expected to provide concrete recommendations for tofu factories in implementing more sustainable waste management practices. By integrating spiritual and ethical aspects in waste management, this study contributes to raising the awareness of the public and industry players on the importance of protecting the environment. Furthermore, the findings from this study can serve as valuable input for policy makers in formulating more effective regulations related to industrial waste management, thus creating synergy between industrial development and environmental protection.

This study should be conducted because inadequate tofu waste management can cause serious pollution to the environment, including water, soil and air pollution. Waste from tofu factories contains harmful substances that can damage the ecosystem and endanger public health. By analysing waste management from the perspective of environmental fiqh, this research aims to provide solutions that are not only technically effective but also in accordance with ethical and moral principles in Islam. This is important to raise industry awareness of their responsibilities towards the environment and the surrounding community.

In addition, this research is also relevant in the context of industrial policy and practice. With the increasing production of tofu in Indonesia, a more sustainable approach to waste management is needed to prevent wider negative impacts. The research results are expected to provide practical recommendations for tofu factories in implementing an environmentally friendly waste management system, as well as input for the government in formulating better regulations related to industrial waste management. Thus, this research not only contributes to science but also to environmental conservation efforts and community welfare.

This research contributes to enriching the study of environmental fiqh by analysing how the principles of environmental that can be applied in tofu factory waste management, an aspect that has rarely been studied in depth. Methodologically, this research combines fiqh analysis, government regulations, and empirical studies, thus providing a more comprehensive perspective in evaluating the conformity of industrial practices with Islamic values and positive law. From a practical perspective, this research can be a recommendation for tofu factory owners to manage waste in a more environmentally friendly manner in accordance with sharia principles, as well as provide input for the government in formulating more effective policies for small industries. Thus, this research is expected to raise awareness of the importance of sustainable waste management in accordance with Islamic principles.

# 1.2 Problem Formulation

Based on the background that has been stated above, the author designed several problems that will be discussed in this paper. The problem designed are as follows:

- 1. How was the waste management process at NJ Tofu Factory Bandung?
- 2. How was the waste management process at NJ Tofu Factory based on figh ecology principles?

# 1.3 Research Objective

Based on the background and problem formulation, the main objectives of this study are:

- Understanding the industrial waste management process at the NJ Bandung Tofu Factory
- 2. Analyzing the suitability of applying Fiqh Ecology principles to the waste management process at the NJ Bandung Tofu

# 1.4 Research Benefits

This research offers several significant benefits, including:

## 1.4.1 Theoretical Benefit

This research is expected to be a learning material to add to the author's scientific insight in conducting research related to industrial waste management in accordance with fiqh ecology and become a literature review for other students and can be a reference for similar research.

This research can change people's perception that well-managed waste can be an important factor in the development of a good environment.

#### 1.4.2 Practical Benefit

- a. For the author, this research is expected to be a learning material to add to the author's scientific insight in conducting research related to industrial waste management in accordance with Figh ecology.
- b. For students, this research is expected to be a literature review for other students and can be a reference for similar research.
- c. For Business Actors, this research is expected to benefit readers, especially business actors, to better understand their obligations to the environment from the waste generated from their production processes.

# 1.5 Literature Review

# 1.5.1 Previous Research

Previous research is needed to be a reference material for research to conduct similar research. This functions so that researchers get more in-depth information about the research variables they will research, as well as to find out the various methods used by previous studies.

First, the thesis written by Nilna Fajral Wildati Haniyah with the title Analisis Maslahah Mursalah Pada Pengelolaan Limbah Industri Tahu Ud. Hua Desa Tropodo Krian Sidoarjo, using descriptive qualitative methods explains that in the management of tofu waste there are two types of waste, namely solid and liquid. Solid waste is managed into animal feed for cows and goats that are deliberately added and maintained around the tofu factory. Meanwhile, liquid waste is reprocessed into vinegar which can be used for the next period of tofu production process.<sup>18</sup>

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<sup>&</sup>lt;sup>18</sup> Nilna Fajral Wildati Haniyah, "Analisis Maslahah Mursalah Pada Pengelolaan Limbah Industri Tahu Ud. Hua Desa Tropodo Krian Sidoarjo" (Universitas Islam Negeri Sunan Ampel, 2020).

Second, a thesis written by Hana Kusumaningtyas. entitled Praktik Pengelolaan Limbah Pada Home Industri Tahu Dalam Perspektif Magashid Syariah (Studi Kasus Di Desa Sribit, Sidoharjo, Sragen) with qualitative field methods. The thesis explained that solid waste management in the home industry itself is reused as animal feed. Meanwhile, the management of liquid waste is made directly without processing. This certainly becomes environmental pollution around the tofu home industry, but the owner builds pads around his home industry to reduce the impact of liquid waste. This talut serves to drain liquid waste directly into the rice fields so that the liquid waste dissolves. 19

Furthermore, the thesis by Ena Adevia Pandu Winata entitle Penegakan Hukum Lingkungan Terhadap Pencemaran Sungai Di Desa Taba Terunjam Kabupaten Bengkulu Tengah Akibat Limbah Industri Karet Perspektif Figh Siyasah with qualitative field methods explains that there has been river water pollution caused by rubber industry waste. This river water pollution is in the form of a pungent odour when blown by the wind, silting of the riverbed which often causes flooding, and if it is dry, the river water will thicken. This is because the waste discharged into the river contains Sulfur (s), Mercury (Hg), Hydrogen cyanide (HCN), Manganese (Mn), Sulfuric Acid (H2SO4), and Lead (bp). In this case, it is certainly not in accordance with the rules of Figh ecology. The Bengkulu City Government has made several countermeasures for the problems that occur, but this is not in accordance with Islamic law, because it has not been able to prosper the earth as it should.<sup>20</sup>

Thesis by Irvan Maulana Muzakynur entitle Implementasi Corporate Social Responsibility(Csr) Untuk Pelestarian Lingkungan

<sup>20</sup> Ena Adevia and Pandu Winata, "Penegakan Hukum Lingkungan Terhadap Pencemaran Sungai Di Desa Taba Terunjam Kabupaten Bengkulu Tengah Akibat Limbah Industri Karet Perspektif Fiqh Siyasah" (Universitas Islam Negeri Fatmawati Sukarno, 2022).

<sup>&</sup>lt;sup>19</sup> Hana Kusumaningtyas, "Praktik Pengelolaan Limbah Pada Home Industri Tahu Dalam Perspektif Maqashid Syariah (Studi Kasus Di Desa Sribit, Sidoharjo, Sragen)" (Universitas Agama Islam Negeri Raden Mas Said Surakarta, 2023).

Hidup Terhadap Pemanfaatan Limbah Industri Perspektif Uu No 32 Tahun 2009 Dan Fiqh Al-Bi'Ah with the method of empirical legal research using a juridical sociological approach who said that according to the testimony of residents around the factory, there was water pollution which eventually resulted in a foul smell in the river water even though the business owner claimed to have used infiltration wells and did not dispose of it directly into the river. Then air pollution occurs due to the pungent stench especially when exposed to heat and wind. This shows that waste management has not been effective and in accordance with laws and regulations and Figh ecology. 21

Then the thesis written by Anang Ihsanudin entitle Analisis Maslahah Mursalah Terhadap Pembuangan Sampah Tekstil Sisa Potongan Kain Jahit with qualitative field methods said that the convection factory produced waste pieces of cloth. This waste is partly managed back into other handicrafts such as mats and brooches. But there are also those who burn it around residents' homes, causing air pollution for the surrounding community.<sup>22</sup>

Thesis written by Syifa Nurul Aeni with the title Implementasi Peraturan Daerah Nomor 14 Tahun 2020 Tentang Perlindungan Dan Pengelolaan Lingkungan Hidup Di Kabupaten Tegal Perspektif Fikih Lingkungan. This research uses a qualitative field method with an empirical juridical approach which states that environmental pollution due to metal industry waste is very detrimental to the community. Hundreds of residents are affected by Acute Respiratory Infection (ARI) and the most dangerous are children born with down syndrome

<sup>21</sup> Muzakynur, "Implementasi Corporate Social Responsibility(Csr) Untuk Pelestarian Lingkungan Hidup Terhadap Pemanfaatan Limbah Industri Perspektif Uu No 32 Tahun 2009 Dan Figh Al-Bi'Ah."

<sup>&</sup>lt;sup>22</sup> A Ihsanudin, "Analisis Maslahah Mursalah Terhadap Pembuangan Sampah Tekstil Sisa Potongan Kain Jahit," Universitas Islam Negeri Mataram (Universitas Islam Negeri Mataram, 2022).

and handicapped conditions due to being born in an unhealthy environment.<sup>23</sup>

Then the thesis written by Erik Adi Pangertu with the title Perbandingan Etika Bisnis Islam Dengan Fikih Lingkungan Dalam Pengelolaan Limbah Industri Tahu (Studi Desa Candiretno Kecamatan Pagelaran Kabupaten Pringsewu). The method used in this research is field research with a qualitative approach in which it states that the impact of the tofu industry on the people of Candiretno Village is to dispose of liquid waste into the river without any prior waste management which makes river water dirty, smelly, cloudy, changes the colour of the water and causes itching for residents who do activities in the river.<sup>24</sup>

In a journal written by Nur Intan Ayu Nisaa' and others with the title Pengelolaan Sampah Desa Talunombo Perpektif Fiqih Lingkungan with a qualitative descriptive research method which explains that the accumulation of large amounts of waste can cause various problems both directly and indirectly for the community. Among them are diarrhoeal diseases, skin diseases, and respiratory problems. On the other hand, flooding can also occur due to river pollution.<sup>25</sup>

This research offers the novelty of integrating environmental fiqh principles with waste management policies regulated by the government, an approach that has rarely been discussed in previous studies. Different from previous studies that generally focus on the normative aspects of Islamic law or regulatory analysis separately, this research examines the synchronisation between magashid sharia and

<sup>24</sup> Erik Adi Pangestu, "Perbandingan Etika Bisnis Islam Dengan Fikih Lingkungan Dalam Pengelolaan Limbah Industri Tahu (Studi Desa Candiretno Kecamatan Pagelaran Kabupaten Pringsewu)" (2023).

<sup>&</sup>lt;sup>23</sup> Syifa Nurul Aeni, "Implementasi Peraturan Daerah Nomor 14 Tahun 2020 Tentang Perindungan Dan Pengelolaan Lingkungan Hidup Di Kabupaten Tegal Perspektif Fiqih Lingkungan" (Universitas Islam Negeri Prof. K.H. Saifuddin Zuhri, 2023).

<sup>&</sup>lt;sup>25</sup> Nur Intan Ayu Nisa, Rizqi Khairani Marfiah, and Handoyo, "*Pengelolaan Sampah Desa Talunombo Persepektif Fiqih Lingkungan Talunombo*," Jurnal Pengabdia Masyarakat Nusantara 3, no. 117 (2023): 80.

government policies in waste management, resulting in a more comprehensive perspective. In addition, this research uses a comparative analysis method that combines fiqh literature review, policy studies, and empirical data from regulatory implementation, which has not been widely applied in similar studies. With this approach, the research is expected to provide practical contributions in building a more sustainable waste management system, based on Islamic values, and in accordance with government regulations.

# 1.6 Research Method

# 1.6.1 Types of Research

This research is included in the type of field research (Field Research) by lifting data based on the situation in the field. This research uses a qualitative approach to determine the suitability of figh ecology with the industrial waste management process carried out by the NJ Bandung Tofu Factory.

# 1.6.2 Research Object

The research object of this research is the industrial waste management of the NJ Bandung Tofu Factory which is directly involved in the data collection that will be carried out by the author, namely the waste management process at the NJ Bandung Tofu Factory.

## 1.6.3 Data Analysis Method

The data collection techniques that will be used in this writing are:

# 1.6.3.1 Primary Data

Is data obtained directly in the field by collecting data using interviews with waste managers at the Tofu Factory NJ Bandung.

# 1.6.3.2 Secondary Data

Is data obtained from library research by studying some literature, articles, documents, websites, and others relevant to this research.

## **1.6.3.3 Inference**

The third stage in qualitative analysis according to Miles and Huberman is conclusion drawing and verification. Initially, conclusions are still temporary and will change if no strong and supporting evidence is found. However, if the evidence is valid with the research then the conclusion is a credible conclusion.<sup>26</sup>

#### 1.6.4 Data Collection Method

## 1.6.4.1 Interview

For primary data collection, an interview technique was used to interview the industrial waste management department at the Tofu Factory NJ Bandung in the form of the process of managing industrial waste at the factory by examining its suitability with fiqh ecology.

## 1.6.4.2 Observation

This was done by directly observing the industrial waste management process at the NJ Bandung Tofu Factory.

# 1.6.4.3 Literature Study

Literature study conducted by reading sources relevant to the topic in this research.

## 1.7 The Research Systematic

This research is structured into four chapters, ensuring a coherent and logical progression of ideas.

Chapter one, provides an overview of the research, including the background, problem formulation, research objectives, research benefits, research methodology, and a review of relevant literature.

Chapter two, this chapter contains an understanding of environmental fiqh, waste management in Islam, tofu waste management, and related regulations that regulate it.

 $^{26}$ M.Si Dr. H. Zuchri Abdussamad, S.I.K.,  $\it Metode\ Penelitian\ Kualitatif$  (CV. Syakir Media Press, 2021).

Chapter three, this chapter explains how the process of managing industrial waste at the NJ Bandung Tofu factory and its compliance with fiqh ecology.

The fourth chapter, in this chapter contains conclusions from the research results along with suggestions. After knowing and studying the industrial waste management process at NJ Tofu Factory Bandung, the researcher will conclude his research and make the culmination point of his research.

