Legal Awareness of Citizens in Preventing Forest and Land Fires (Karhutla) in South Kalimantan Province

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Abstract

This article is based on an empirical study of forest and land fires in South Kalimantan Province. These fires frequently occur and persist, especially during drought seasons. The main causes are twofold: first, the expansion of agricultural land through clearing new areas; and second, the negligence of residents during hot, dry seasons, such as discarding cigarette butts carelessly without considering the potential consequences. The root issue behind these fires is the low level of legal awareness among citizens. This lack of awareness is due to the low educational levels of residents living near fire-prone areas, as well as insufficient and poorly structured government-led socialization efforts. Additionally, the economic conditions of these communities, where many are low-income farmers, contribute to their reliance on traditional, quick, and cost-effective methods like burning to manage land for agriculture. This practice not only harms the environment but also impacts public health. Therefore, effective measures to address forest and land fires require a dual approach from the authorities: enhancing legal awareness through improved socialization efforts and addressing the economic challenges faced by residents in fire-affected areas.

Keywords: Legal Awareness, Forest and Land Fires, Agricultural Expansion, Environmental Damage.

Introduction

In Indonesia, forest and land fires (*karhutla*) occur annually in a repetitive cycle, typically during the dry season from July to October. Despite various efforts by the Central and Regional Governments and disaster management agencies—such as direct firefighting, using machines to spray water, deploying helicopters, and conducting cloud-seeding for artificial rain—these fires persist and disrupt public life. For instance, in early September 2023, several Indonesian cities were enveloped in smog due to a significant increase in forest and land fires compared to the previous year. According to the Minister of Environment and Forestry, Siti Nurbaya, there were 3,788 fire hotspots recorded on September 5, 2023, nearly four times the 979 hotspots from the previous year (Nurbaya, 2023).

The impacts of these fires are severe, affecting public health and daily life. Thick smoke has led to respiratory issues and disruptions in transportation by land, river, and air. The Meteorological, Climatological, and Geophysical Agency (BMKG) has warned that the situation could worsen compared to the past three years, potentially causing acute respiratory infections (ARI) due to the smoke (BMKG, 2023). In Sumatra, the air quality in cities like Palembang and Jambi deteriorated to "unhealthy" levels by September 7, 2023, following days of haze. Residents reported discomfort and poor air quality, as noted by journalist Nefri Inge Yan Resti for BBC News Indonesia (Resti, 2023).

Forest and land fires are a recurring issue in South Kalimantan Province, especially during the dry season. According to the Regional Disaster Management Agency (BPBD), the three districts with the highest number of fire hotspots are Barito Kuala Regency, Banjar Regency, and Tanah Laut Regency. These areas contain significant amounts of peatland, which, when ignited, results in prolonged and challenging extinguishing processes. The fires disrupt ecosystems, harm public economic activities, and incur substantial costs for firefighting efforts (BPBD, 2023).

A key question is why forest and land fires persist annually during the dry season, particularly in South

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Kalimantan Province. One reason might be the lack of community involvement in firefighting measures, which contributes to the recurring nature of these fires. Field research indicates that in Barito Kuala, Banjar, and Tanah Laut, fires are often intentionally set by residents as part of their land preparation for agriculture. This practice, which has become a longstanding habit, is used to clear land efficiently during the dry season (Field Research, 2023).

The current approach to disaster management seems to rely heavily on government and environmental agencies without involving local communities. When fires set by residents spread and cause thick smoke, government agencies and the Regional Disaster Management Agency (BPBD) are often left to handle the situation. This reactive approach perpetuates the cycle of fires, as residents continue to use burning as a land-clearing method (BPBD, 2023).

Addressing forest and land fires requires a serious and comprehensive approach, particularly focusing on enhancing legal awareness among residents in affected areas. Understanding the level of legal awareness and its impact on fire prevention is crucial. Additionally, researching why residents resort to burning and their motivations could provide valuable insights. Engaging communities in active collaboration with the government and other stakeholders is essential to effectively prevent and manage these disruptive fires (Ambarita, 2021; Hasibuan, 2013).

Literature Review

Legal Awareness

Syamsudin (2012) defines legal awareness as an internal understanding of the harmony between desired order and the reality of compliance. Syamsudin (2012) identifies the following indicators of legal awareness:

- Knowledge of legal regulations: Awareness of existing laws and regulations.
- Understanding of legal requirements: comprehension of the requirements stipulated by the laws.
- Attitudes towards legal regulations: Individuals' perspectives and attitudes towards adhering to the laws.
- Behavior patterns related to the law: The actual behavior exhibited by individuals in relation to legal compliance.

These indicators are used to measure the level of legal awareness in public life. Legal awareness is thus an abstract concept, observable through concrete behavioral parameters. High legal awareness is demonstrated by individuals or communities who voluntarily comply with laws without coercion or supervision. Such individuals adhere to the law out of a deep-seated personal commitment, not merely out of fear of penalties or enforcement.

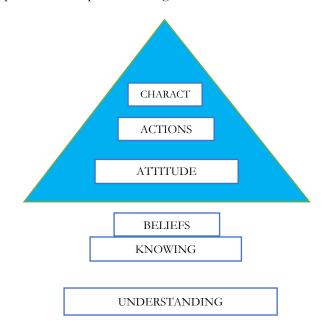
Legal awareness involves an understanding of and respect for the law, which encompasses fundamental values such as justice, virtue, and humanity. It is crucial for maintaining an orderly, just, and peaceful society. Continuous improvement in legal awareness is essential for fostering a law-abiding and harmonious community.

However, legal awareness and compliance are distinct concepts. Compliance can occur due to fear of legal penalties or the presence of law enforcement officers. If legal penalties are perceived as minor or if law enforcement is ineffective, compliance may be superficial. This form of compliance, driven by fear or external supervision, can be termed as "pseudo-compliance." True adherence to the law comes from internal motivation and respect for legal norms, rather than external pressures.

Elements Legal Awareness

Sudikno Mertokusumo (2005) emphasizes that legal awareness represents the dynamic and evolving public perception of the law. The term "life" implies that this awareness is not static but continuously changing and evolving, influencing the law itself. Legal awareness involves both "knowing" and "understanding" the law, which embodies fundamental values such as justice, virtue, and a deep-seated belief in humanity. These values motivate individuals to uphold the law through consistent behaviour and personal commitment, rather than through coercion or intimidation.

Based on this description, the components of legal awareness can be illustrated as follows:



Knowledge of the Law

Knowledge of the law is the foundational element for forming legal awareness. It is impossible for someone to be aware of something if they do not know it exists. Therefore, individuals must first become acquainted with the law, as it represents the orders and rules established by the state (positivistic law) (Dimyati, 2014). According to Hans Kelsen's teachings on positivistic law (Nasution, 2014), individuals are required to obey these laws as they are mandated by the state. Legal awareness starts with understanding that laws exist and encompass various rules that include prohibitions and permissions regarding specific actions. These rules can be represented through written laws or legal symbols, such as traffic signs indicating pedestrian crossings, which communicate legal obligations and prohibitions.

To ensure that everyone is aware of the law, it is crucial to engage in effective socialization. This can include public announcements, media dissemination, electronic communications, and direct dialogues with community representatives. Socialization efforts are conducted across different levels, from national to local, to make sure that all residents, regardless of their background, understand the laws that will be enforced. This broad communication aims to eliminate excuses of ignorance regarding legal obligations and promote compliance.

Effective legal socialization involves substantial and well-funded programs that reach all sectors of the public, informing them about the rules and the importance of adhering to them. The goal is to foster an environment of order, security, peace, and prosperity in the nation.

Understanding the Law

Understanding the law involves more than just knowing its existence. It requires a deep comprehension of the rules and their implications. This includes not only being aware of what is prohibited or permitted but also understanding the penalties associated with violations. Many individuals, including both ordinary citizens and state officials, may violate the law despite being aware of its prohibitions and penalties. This suggests that merely knowing about the law is not enough to ensure compliance.

For true legal awareness, individuals must grasp the essence of the rules and the reasons behind them. This deeper understanding helps ignite a genuine sense of responsibility and enables individuals to interpret and apply the law accurately. Knowing the law is a starting point, but comprehensive understanding is necessary to foster true legal consciousness and compliance.

To truly understand the law, one must go beyond the mere text of legal articles or symbols. It's crucial to explore the fundamental values underpinning legal rules and their purpose in society. Law is not just a collection of mandates but a reflection of deeper values designed to protect human dignity and ensure justice. Law serves to safeguard individual rights and maintain social order, preventing chaos where the strong might exploit the weak. The fundamental purpose of law is to preserve honor and protect against neglect, harassment, and abuse.

The law's role is to establish order and protect societal interests. Without law, society would face anarchy, where the powerful prey on the vulnerable. Thus, law embodies a commitment to fairness, ensuring that everyone, regardless of background, is treated with respect and dignity. This commitment aligns with the concept of justice as envisioned in philosophical and national ideologies.

Pancasila as the Foundation of Law

In Indonesia, Pancasila is the foundational ideology that informs all legal principles and practices. It represents the "basic norm" of the state, shaping the laws and their implementation. Pancasila emphasizes two key relationships:

- Vertical Relationship: The individual's relationship with God, guided by personal religious beliefs.
- Horizontal Relationship: The individual's relationship with others, emphasizing love, respect, and honor for fellow humans.

The first principle of Pancasila asserts the importance of upholding human dignity, equating the respect for human dignity with reverence for the divine. This principle is reinforced by the second principle of Pancasila, which advocates for just and civilized humanity. The law, therefore, should reflect these values, promoting fairness and civility in all aspects of life.

Belief in Legal Norms and Their Values

When individuals deeply grasp the law's intrinsic values, their approach to public service and legal compliance becomes more genuine. They see the law as a means to achieve personal and societal good rather than merely avoiding penalties. For example, a police officer who upholds the law with integrity and fairness will earn respect and admiration, reflecting a strong belief in the law's virtues.

However, many people only perceive laws as restrictive or burdensome, failing to appreciate their underlying values. Drivers who disregard traffic rules might see these laws as inconvenient rather than beneficial. To shift this perspective, it's essential to educate the public on the moral and practical benefits of legal compliance. This includes integrating ethical aspects of the law into educational programs, starting from pre-service training for public officials to broader public education.

Obedience-Oriented Attitude in Law Enforcement

An obedience-oriented attitude towards the law is shaped by an individual's knowledge, understanding, and belief in the law's virtues. This attitude encourages compliance and respect for legal norms, evident in various situations. For example, a person applying for a driver's license may demonstrate their respect for the law through their interaction with the officer. Efficient and fair handling of such processes reflects a positive, obedience-oriented attitude.

Conversely, seeking shortcuts or special treatment in bureaucratic processes undermines the rule of law and suggests a lack of genuine commitment. To address these issues, it is crucial to foster a respect for legal rules and ensure consistent enforcement. This requires effective legal education and the commitment of public servants to uphold the law impartially.

Personality Character and Legal Awareness

At the highest level of legal awareness is the development of a strong personality character, characterized by adherence to moral and legal norms. This character embodies deep-rooted principles of goodness, responsibility, and respect for humanity. Individuals with this level of character are resilient, principled, and resistant to external pressures or temptations. They act with integrity, prioritizing their moral and legal obligations and maintaining their dignity.

Such a strong personality character represents the highest form of legal awareness, where individuals' behavior aligns with both personal and societal standards of justice. This demonstrates a high level of civility and positively contributes to society, reflecting personal integrity and respect for others.

Citizen's Awareness and Legal Awareness in Preventing Forest and Land Fires

Importance of Citizen Awareness

Citizen awareness is crucial in preventing and addressing forest and land fires, which have severe impacts on the environment, economy, and public health. Key aspects of citizen awareness include:

Environmental Impact: Fires can destroy ecosystems, lead to the loss of biodiversity, and deplete natural resources. Awareness of these consequences motivates conservation and environmental protection efforts.

- Air Quality: Fires produce harmful fumes that can cause long-term health issues. Understanding this can drive individuals to avoid activities that contribute to fires.
- Social and Economic Impact: Fires can damage property, threaten lives, and result in significant economic losses, especially for communities dependent on forests and land for their livelihoods.
- Causes of Fires: Citizens should understand the causes of forest and land fires, including irresponsible human activities, climate change, and natural factors. This understanding helps in contributing to preventive measures.
- Prevention Measures: Awareness involves practicing fire prevention techniques, such as not discarding cigarette butts carelessly, avoiding illegal burning of waste, and reporting potential fire hazards to local authorities.
- Safety and Evacuation: Citizens need to know how to respond to and secure themselves and their neighbors in the event of a fire.
- Role in Fire Control: Awareness includes understanding how to support fire control efforts, such as assisting firefighters or volunteers.

- Education and Campaigns: Governments and environmental organizations should lead educational campaigns to raise awareness and provide accessible information on fire prevention.
- Beyond Personal Responsibility: Citizens must recognize that individual actions alone are insufficient; collective efforts and adherence to legal regulations are necessary to prevent fires and protect the environment.

Factors Affecting Citizens' Legal Awareness in Preventing Forest and Land Fires

- Legal Enforcement: Effective enforcement of laws against forest and land fires is crucial. Maximum penalties for fire-related offenses can deter potential offenders and reinforce the seriousness of fire prevention laws. Weak enforcement contributes to worsening fire situations, as noted by environmental organizations like Wahana Environment (Walhi).
- Lack of Knowledge and Understanding: Many rural residents lack awareness about the impacts of forest and land fires due to limited information and education. This knowledge gap results in a normalization of burning practices for land preparation, which may be viewed as traditional and practical despite its environmental consequences.
- Traditional Practices: The practice of burning land for agriculture and plantations is often seen as cost-effective and practical. This traditional approach, coupled with insufficient enforcement and education, contributes to lower legal awareness and higher rates of forest and land fires.

Improving citizen awareness and understanding of the law is essential for preventing forest and land fires. This involves education on the environmental and health impacts of fires, as well as effective law enforcement and the promotion of alternative, sustainable land management practices. Addressing these factors can help foster a culture of responsibility and compliance, ultimately contributing to better fire prevention and environmental protection.

Methodology

Study Approach

The research adopted a qualitative approach. This approach was chosen because the focus was on understanding the internal legal awareness of citizens regarding the prevention of forest and land fires. Qualitative methods were well-suited for exploring attitudes and behaviours in depth. They allowed for a nuanced examination of how citizens perceived and acted upon legal awareness and the factors influencing it. According to experts, qualitative research was effective for uncovering detailed insights into human attitudes and behaviours.

Study Approach

Research Sites

The study was conducted in three districts in South Kalimantan Province where forest and land fires were prevalent:

- Barito Kuala District: Specifically, the Mandastana sub-district.
- Tanah Laut District: Specifically, the Kurau sub-district.
- Banjar District: Specifically, the Peat area.

These areas were chosen due to their significant incidence of fires and provided insight into the local

conditions and responses.

Data Collection Techniques

The research involved collecting data in two main areas:

- Legal Awareness of Citizens: Understanding how citizens perceived and understood laws related to preventing forest and land fires.
- Factors Influencing Awareness: Identifying factors that affected citizens' awareness and actions regarding fire prevention.

Data was collected using the following techniques:

- Observation: Examining the fire-affected areas and their natural surroundings to understand the environmental context.
- In-Depth Interviews: Conducting face-to-face interviews with residents around the fire points, including both local leaders and ordinary citizens. This helped gather detailed information about their legal awareness and the factors influencing it. Interviews were structured and conducted in both personal and group settings.
- Documentation: Collecting and analyzing relevant documents to enrich the information and provide evidence to support the research findings.

Data Analysis Techniques and Conclusions

The data analysis followed a qualitative approach with the following steps:

Data Reduction: This initial step involved summarizing and organizing the collected data, focusing on key aspects related to legal awareness and influencing factors.

Data Presentation: Presenting the reduced data in a structured format, such as tables, and interpreting it descriptively. This step involved explaining the findings in narrative form, highlighting the main themes and insights.

Conclusion Drawing: Formulating conclusions based on the descriptive analysis. This involved synthesizing the findings into clear, actionable insights and summarizing the key results of the study.

Each step in the analysis process was interrelated, ensuring a comprehensive understanding of the study's focus. The sequential analysis helped in providing a coherent narrative and actionable conclusions regarding the legal awareness of citizens and its impact on preventing forest and land fires.

Results and Discussion

Causative Factors of Forest and Wetland Fires

Forest and wetland fires frequently occurred, especially during the dry season, according to information from various stakeholders, including citizens, community leaders, government officials, and frequent fire management personnel.

Table 1:	Causes	Forest	and	Wetland Fires	
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Confession informant

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Reason Fire	Yes	%	No	%	Amount	%
Opening of New Land	42	84%	8	16%	50	100%
Land Clearing for agriculture	12	24%	38	76%	50	100%
carelessness / negligence of inhabitants	6	12%	44	88%	50	100%

Source: Interview Results with Informants

Based on the data mentioned above, the primary causative factors for forest and wetland fires during the dry season are as follows:

Firstly, many residents, when faced with drought conditions and the need to expand agricultural land, often resort to clearing and burning forests. This method is perceived as faster, more practical, and less costly compared to other land-clearing methods. This information was confirmed by community leaders, village officials, and senior fire management officers. They reported that forest and land fires generally start from land clearing activities, which, combined with the hot weather of the dry season, result in fires spreading to surrounding areas.

Secondly, during the dry season, residents often burn dry grass while preparing land for planting. This method is seen as easier and less labor-intensive compared to alternative processes. Interviews with several residents, including community leaders and government officials, revealed that this practice contributes to the smoke and health problems associated with fires. A local health officer noted an increase in respiratory complaints during the dry season, which is attributed to the smoke from these fires.

Thirdly, carelessness or negligence among residents also contributes to forest and land fires. Some citizens, including those interviewed, suggested that the sudden appearance of fires and smoke might be due to careless disposal of cigarette butts in forested areas. This prediction is supported by observations of fishing activities and smoking habits among residents during the dry season. According to experts, even small sparks from cigarette butts can ignite fires under dry and hot conditions (Suharjo & Hasanah, 2023).

The frequent occurrence of fires in populated areas, as described above, is also linked to long-standing customs and traditions related to agricultural activities. These practices have been in place for a long time and have not yet been completely changed. Economic conditions also play a role; many residents, facing low economic status, find burning as an economically feasible method for land clearing. Given the high costs of alternative methods, burning remains a preferred practice.

This evidence suggests that addressing the issue of recurrent forest and land fires requires more than just repressive measures. It is essential to address the root causes, including improving residents' economic conditions. Enhancing economic livelihoods could lead to more effective management of forest and land fires and reduce their frequency.

Citizens' Legal Awareness of Law Forest and land fires Wet

Awareness among citizens about forest and land fires can be assessed through their adherence to the law. According to Elan Nora, public legal awareness is reflected in the level of obedience and compliance with the law (Nora, 2023). Furthermore, legal awareness can be measured through various aspects, including knowledge, understanding, beliefs, attitudes, and actions related to forest and land fires. The findings regarding citizens' legal awareness are as follows:

Awareness	Yes	%	No	%	Amount	%
Knowledge	50	100%	0	0	50	100%
Understanding	44	88%	6	12%	50	100%
Confidence	28	56%	22	44%	50	100%
Attitude	28%	56%	22	44%	50	100%
Actions	20	40%	30	60%	50	100%

Table 2: Citizens' Awareness of Forest and Land Fires

Data sources are processed from results interviews and discussions deep with informant

Awareness of Citizens Regarding Forest and Land Fires

Upon closely examining the data provided, it is evident that the level of awareness among informants regarding forest and land fires can be measured in terms of knowledge. This knowledge is relatively good; it indicates that they are generally aware of the prohibition against burning land as stipulated by forest management and protection laws, including the types of penalties, such as criminal charges and fines, for violations. This was confirmed by discussions with various informants, including Village Guidance Officers (*Babinsa*), community leaders, and religious figures, who indicated that citizens in the affected areas are aware of the prohibition on burning land and forests. They also understand the impacts of forest and land fires on health and the environment.

However, it is interesting to note why the behaviour of burning persists despite this awareness. The phenomenon appears to be linked to a lack of deep understanding and personal conviction about the negative consequences of such behaviour. In other words, there is still a low level of moral responsibility toward oneself, others, and the environment. This discrepancy is reflected in the data, showing that while knowledge and awareness of laws and their impacts are present, beliefs and attitudes do not align with this knowledge. The problem of low legal awareness is not isolated; it is intertwined with long-standing habits and cultural traditions. As noted by Syamsarina et al. (2022), cultural factors significantly influence legal awareness. Hasibuan also points out that weaker legal awareness corresponds with weaker obedience to the law (Hasibuan, 2013).

Another influential factor is the economic situation of the residents. Due to their low economic capacity, many residents cannot afford modern, more expensive methods for land clearing. As indicated by several local residents and village authorities, the traditional practice of burning is more cost-effective compared to technological methods. The inability to invest in alternative methods reinforces the persistence of traditional burning practices.

Recent data from the Head of the Agricultural Centre in the affected area suggests that the frequency and extent of forest and land fires have decreased. This reduction could be due to increasing legal awareness or other contributing factors. Village officials have suggested that growing public awareness may be responsible for the decrease. However, this explanation seems inconsistent with the data on residents' legal awareness. In contrast, information from local residents indicates that the reduction in burned land is primarily due to the decreased availability of land for new agricultural development, rather than increased legal awareness. For example, a public figure stated that the area of unused land for agriculture has significantly decreased over the past five years, with only about 25% of land remaining undeveloped. This data supports the conclusion that the reduction in fire frequency and extent is more related to the diminished availability of land for cultivation rather than an increase in legal awareness.

Level of education	J1	%
elementary school	6	12%
JUNIOR HIGH	18	36%
SCHOOL		
SENIOR HIGH	22	44%
SCHOOL		
D2/D3	-	-
S1	4	8%
Total	50	100%

Data on the educational levels of residents living near fire-affected forest and land areas, as previously stated, it was found that individuals with higher education levels, such as government officials, Village Guidance Officers (*Babinsa*), and local youth leaders, generally have a higher level of legal awareness compared to the majority of local residents who have lower education levels. This relationship between education and legal awareness is significant; higher levels of education are associated with better knowledge and awareness. Therefore, the study results suggest that one reason for the low legal awareness regarding forest and land fires is the generally low level of education among residents.

Another contributing factor to the low awareness is the lack of socialization. According to M. Arif and Ida Mursida, socialization is crucial for the growth and development of awareness (Hasibuan, 2017). Ambarita (2021) also emphasizes the importance of mass socialization to educate the public on preventing and managing forest and land fires. According to interviews with local public figures such as Trj, Mnh, and Mjd, residents reported that they had only participated once in local government events related to fire prevention. These events focused primarily on methods for dealing with fires rather than on raising awareness about fire prevention.

One explanation given is that residents need to secure their homes by clearing dry grass around them and preparing necessary tools for fire extinguishing before the arrival of fire services (Damkar), as well as coordinating with local authorities. However, these efforts are more about preparedness than about developing a deep awareness of fire prevention. This lack of emphasis on raising awareness is reflected in the data, which shows that although residents are prepared for fires, their understanding of the importance of preventing fires remains low. The issue is compounded by the persistence of the "slash and burn" tradition for clearing new land, which continues to be justified despite its negative consequences.

The low level of legal awareness among residents needs attention because, legal awareness is an effective tool for implementing laws (Marsinah, 2016). To address this issue, there needs to be massive, structured, and sustainable socialization efforts. Socialization should not be a one-time or sporadic activity but should be continuous, aiming to change views and behaviours among residents engaged in agriculture. It is crucial for all parties, including government officials, social organizations, religious groups, and others, to collaborate in raising awareness among residents, especially those living in fire-prone areas. Such cooperative efforts not only reinforce traditional values of mutual aid but also reflect a genuine commitment to minimizing the disruptive impacts of forest and land fires, which are harmful to both health and the environment. Joint efforts and collective action are key to effectively addressing and solving national issues

Conclusion

Forest and land fires frequently occur during each drought season and are primarily caused by two factors: first, the expansion of agricultural land, and second, carelessness or negligence, such as haphazardly discarding cigarette butts during hot, dry weather. The root cause of these fires is the low legal awareness among residents. This low awareness is attributed to the generally low level of education in the areas affected

by fires. Additionally, the lack of effective, structured, and sustainable socialization efforts by government authorities contributes to this issue. The situation is further exacerbated by the low economic status of the residents, who are primarily farmers with limited income. This economic condition influences their management practices, leading them to continue using traditional methods such as burning to clear land, which is seen as easy, practical, and cost-effective. As a result, these practices contribute to environmental damage and negatively impact public health.

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