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The Reality of Environmental Crimes in the West Bank: Perspectives of Legal Practitioners and Experts

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Abstract

The study aimed to explore the reality of environmental crimes committed in the West Bank from the perspective of specialists. Using a quantitative descriptive approach, the study employed a structured questionnaire to collect data from a sample of 100 respondents, including representatives from the Palestinian Environmental Quality Authority, Environmental Police (Tourism and Antiquities Police), and institutions within the Palestinian Environmental NGOs Network. The sample was drawn from a target population of 182 specialists in environmental affairs using a convenience sampling method. The study also utilized the historical approach by reviewing relevant previous studies and analyzing their findings. The results indicated that the prevalence of environmental crimes in the West Bank is very high. The most common crimes were linked to commercial and industrial practices. The primary driver behind these crimes was the lack of awareness regarding environmental issues. The study found that the main environmental damages included the loss of biodiversity, increased costs of environmental protection, deterioration of water resources, and shrinking vegetation cover. The study recommended implementing awareness campaigns through educational and religious institutions, as well as social media platforms, to foster environmental values in the West Bank.

Keywords: Crime, Environment, Environmental Crimes, West Bank, Legal Accountability

Introduction

Human existence and survival occur with the environment through interactions to ensure basic needs like food and shelter (Watson, 2005). Human actions are governed by a social contract that outlines acceptable behavior, including crimes against the environment such as Barclays & Bartel (2015). With increased development in industries and technology, there has been more environmental crimes being committed by man that have had extreme ecological and biological consequences on Earth, as established by Ruggiero (2020). These

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crimes, which include illegal waste disposal, pollution, and land degradation, have significant consequences for plants, animals, and humans (Casali et al., 2022). Therefore, a scientific examination of the state of environmental crimes in the West Bank is necessary to understand the issue and its implications (Katiambo, 2021).

In 2018, the Palestinian National Authority assigned the Environmental Police to protect the environment against risks such as pollution and destruction (Wright, 2017). Between 2018 and 2019, there were 145 investigated cases of environmental crimes, an indication of a greater concern for the environment (Ozymy et al., 2021). In 2022, environmental crimes increased, with 96 cases reported, including illegal waste disposal, water pollution, damage to heritage sites, and illegal excavation for artifacts (Riccio et al., 2024). Additionally, land violations and the burning of petrochemical materials harmed soil and contaminated groundwater, posing significant health risks (Zhang & Zhang, 2024).

Given the environmental challenges experienced, the research will try to find out the reality of environmental crimes in the West Bank, its types, causes, and effects. The paper will look at expert opinions, which will shed much light on the impact these crimes have had, and hence forward policy and enforcement strategies in protecting the environment will be determined by the results (Connealy & Corts, 2024).

Literature Review

Environmental crimes are defined as actions that harm the environment in ways that disrupt its natural balance or cause damage to its resources (Watson, 2005). The environment is the natural surroundings where humans and other organisms exist and is made up of air, water, land, and the resources provided by nature (White, 2013). Against this backdrop, a crime refers to an unlawful act punished by law when done with criminal intent (South, 2002). The two elements of crime and environment, when combined, breed activities that are harmful to the ecosystem either wittingly or unwittingly (Barclay & Bartel, 2015). Environmental crimes can assume different dimensions of land, air, and water criminality or activities impinging on biodiversity (van Uhm & Nijman, 2022). These crimes typically entail direct or indirect harm to natural resources through industrial pollution, poor waste management, deforestation, or the exploitation of wildlife (Shelley, Chiricos, & Gertz, 2011). These actions lead to severe environmental deterioration that threatens human health and the lives of all organisms relying on a balanced ecosystem (Ruggiero, 2020).

A crime, on the other hand, is a forbidden act committed with criminal

intent and punishable by law (South, 2002). When these two elements—crime and environment—combine, they result in actions that damage the ecosystem, whether intentionally or unintentionally (Barclay & Bartel, 2015). Environmental crimes can manifest in various forms, including activities that harm the land, air, or water, or those that disrupt biodiversity (van Uhm & Nijman, 2022). These crimes usually entail direct or indirect damage to the environment through industrial pollution, poor waste disposal, deforestation, or the exploitation of wildlife (Shelley, Chiricos, & Gertz, 2011). These result in severe environmental damage that may even threaten human life and the survival of all forms of life that rely on a healthy ecosystem (Ruggiero, 2020).

Environmental crimes are generally classified according to the type of pollution or damage committed (Casali et al., 2022). For example, soil and land pollution involves waste, chemicals, and other harmful materials degrading the land, rendering it less fertile for use. This is according to Puxan-Oliva, 2020. Air pollution, caused by harmful gases, industrial emissions, and transportation-related pollutants, leads to respiratory illnesses and climate change. This is in accordance with Heckenberg & White, 2020. The usual suspects are water pollutions, commonly as a result of improper waste disposed in rivers, lakes, and oceans, harming aquatic life, affecting water quality, and endangering human health by Katiambo, 2021. Lastly, crimes against natural reserves and historical sites may consist of illegal hunting, deforestation, vandalism; all these significantly affect the habitats and cultural heritages by Wright, 2017. Moreover, cruelty to animals, particularly endangered species, contributes to biodiversity loss and ecological imbalances (Ozymy, Menard, & Jarrell, 2021). These crimes not only damage the environment but also result in severe consequences for human populations, such as health issues, economic losses, and a diminished quality of life (Santos et al., 2024). The long-term effects can be catastrophic, compromising the planet's ability to sustain life (Goyes et al., 2021).

The Structural Functionalist Theory, 1895: This is a concept that was developed by Émile Durkheim explaining that social deviance may be based on structural imbalances within society (Watson, 2005; White, 2013). It views society as being composed of institutions, each of which has a specific role or function, and which, when unable to play those roles, results in dysfunction which can be expressed as deviance, of which environmental crimes are a part (South, 2002). It follows, therefore, from this theory that environmental crimes are committed because the institutional socialization of individuals in respect of the environment by the family, schools, and religious institutions has been incomplete thus heightening the risk of such crimes (Barclay & Bartel, 2015).

Routine Activity Theory, 1979: It was developed by Marcus Felson and Lawrence E. Cohen, who pointed out that for the crime to occur, three important conditions must be met: suitable target, a motivated offender, and absence of capable guardianship Shelley, Chiricos, & Gertz, 2011). The environmental crimes, too, would therefore show a high chance of occurrence with little oversight and security and the motivated offenders and accessible targets, which means the environment, as seen by Ruggiero, 2020.

The Multiple Factor Theory (1928): Proposed by Enrico Ferri, this theory assumes that crime is the result of the combination of various factors, further distinguished into internal (biological and psychic) and social factors. Casali et al. (2022) Internal factors will involve biological constitution, hereditary influences, and psychic anomalies. Puxan-Oliva (2020) Social factors pertain to environmental ones and encompass cultural and economic aspects; the latter refers to poverty as a factor in environmental crimes. Heckenberg & White (2020).

For example, in discussing international and domestic communities with involvement in the solution to environmental crimes, there is the contention that environmental crimes rate among the most hazardous global crimes as material phenomena, while for effective protection of individual and communal human rights, one key threshold is overcome or lack of awareness of environmental impact (Watson 2005; White, 2013). The study also noted that legal systems differ in their approach to environmental crimes, with some, like the Saudi legal system, emphasizing environmental protection (Barclay & Bartel, 2015). Recommendations included defining environmental crime through international law, establishing legal penalties within international criminal courts, and creating bodies dedicated to prosecuting environmental offenders (van Uhm & Nijman, 2022).

Another study was involved in following and monitoring environmental crimes; it found that gaps within the legal structure and lack of judicial oversight serve as barriers against effective monitoring. "It recommended promulgation of a unified law on environment, raising public awareness, and establishing specialty courts for criminal cases on environmental crimes" (Shelley, Chiricos, & Gertz, 2011). Casali et al. (2022).

Methodology

This research paper will explore the reality of environmental crime in the West Bank, types of environmental crimes, causes, and consequences. The identification of key aspects of environmental crime will provide insights that could inform policy, regulation, and further research on the topic. The main tasks of the study are to find out the kinds of environmental crimes happening in the

West Bank area, examine causes and motives that force such crimes to happen, and then weigh their aftermaths. For that purpose, the descriptive approach is applied with an integration of both qualitative and quantitative methods. A survey tool was designed. It consists of two parts: demographic data and the survey items. The second part comprised three main components: the level of environmental crime (10 items), causes and motivations of environmental crimes (10 items), and effects of environmental crime (9 items). Moreover, historical approach was based on the already conducted research, where theoretical framework was provided with a scientific background in this area.

The validity of the survey tool was promoted by expert review from faculty members at Al-Quds University and other Palestinian universities. Comments from the reviewers were considered for revision. It was pre-tested for clarity with two participants from the study sample; based on the feedback, some adjustments were made to enhance understanding. The Pearson's Product Moment Correlation Coefficient indicated that items and sections inter-correlated at a significant degree, hence meeting the criteria on internal consistency. The test-retest method was not applicable because logistically it posed a number of difficulties given that the conflict continued. Reliability of the tool had to be cross-checked using Cronbach alpha and split-half reliability coefficients with results indicating their appropriateness. The geographical scope of this study is confined to the 11 governorates of the West Bank, and data collection will be from September 2023 to July 2024. This is a convenience sample of 100 respondents who are specialists in environmental issues and represent Palestinian environmental organizations, the Environmental Quality Authority, and the Environmental Police.

Table 1. Pearson Correlation Results for the Matrix of Correlations of Each Item in the Survey with Its Total Score to Measure the Validity of the Tool.

Item	R Value	Significance	Item	R Value	Significance	Item	R Value	Significance
Dimension: Reality of Environmental Crimes in the West Bank from the Respondents' Perspective								
Types of Committed Environmental Crimes								
B1	540.**	0.000	B5	459.**	0.000	B9	333.**	0.001
B2	471.**	0.000	B6	719.**	0.000	B10	502.**	0.000
B3	715.**	0.000	B7	627.**	0.000	B11	459.**	0.000
B4	602.**	0.000	B8	651.**	0.000			
Causes and Motives for Committing Environmental Crimes								
C1	410.**	0.000	C5	556.**	0.000	C9	492.**	0.000
C2	587.**	0.000	C6	507.**	0.000	C10	604.**	0.000

C3	662.**	0.000	C7	561.**				
C4	632.**	0.000	C8	691.**				
Consequences of Committing Environmental Crimes								
D1	503.**	0.000	D5	558.**	0.000	D9	629.**	0.000
D2	538.**	0.000	D6	582.**	0.000	D10	731.**	0.000
D3	515.**	0.000	D7	713.**	0.000	D11	709.**	0.000
D4	587.**	0.000	D8	578.**	0.000	D12	665.**	0.000

Following the collection and validation process, data were coded and entered into SPSS for analysis. The analytical statistics involved Pearson's correlation test for validity; Cronbach's alpha and split-half reliability tests; skewness values significance test for data normality; mean and variance tests for the items in the survey; Mann-Whitney and Kruskal-Wallis tests to examine statistical hypotheses. These steps provided a rigorous analysis that would validate the conclusions and objectives of the study. The limitations realized in this study included a lack of local studies on environmental crime in the region, thus limiting the contextualization of knowledge, and a difficulty to define the population due to various political reasons that restrict communication based on occupation-based policies; hence, electronic questionnaires were adopted to reach out to a greater number. Besides these challenges, the study gives an overview of the state of environmental crime in the West Bank and suggests areas for future research that include triangulation with legal practitioners' views to further enhance the robustness of the results.

Table 2. Cronbach's Alpha and Split-Half Coefficient for Internal Consistency and Reliability Check of the Survey.

Dimension	Number of Items	Cronbach's Alpha Value	Split-Half Coefficient Value
1. Types of Environmental Crimes Committed in the West Bank	11	0.817	0.756
2. Causes and Motives for Committing Environmental Crimes	10	0.811	0.797
3. Consequences of Committing Environmental Crimes	12	0.871	0.76
Overall Score for the	33	0.908	0.836

Reality of Environmental Crimes in the West Bank

After collecting and validating the questionnaires for analysis, they were coded with specific numbers to prepare for data entry into the computer for the necessary statistical analysis using the Statistical Package for Social Sciences (SPSS). The statistical processing included Pearson's correlation test for validity, Cronbach's alpha and split-half reliability tests for reliability, skewness values significance test for data normality, mean and variance tests for all survey items to obtain results related to the study's questions, and the Mann-Whitney and Kruskal-Wallis tests to examine statistical hypotheses. These steps ensured rigorous analysis to support the study's objectives and conclusions.

The results in Table 3 indicate that the final sample of the studied population on which statistical analysis was conducted consisted of 100 individuals. From this, 46% were males, while 54% were females, as shown in the table. The slight increase in the female percentage can be attributed to the higher proportion of women in targeted institutions, considering that environmental police are less exposed to the job's risks compared to other police departments. Regarding age distribution, 61% of respondents were 30 years old or younger, 21% fell between 31 and 40 years old, 14% were aged between 41-50, and 4% were 50 years or older. This reflects the requirement for environmental expertise, which generally results in older participants in environmental institutions. The academic qualification levels for the respondents were as follows: 2% diploma level and below, 74%, bachelor's level, and 24% postgraduate qualifications. The number of bachelor's level graduates is high because the requirement was that a target institution had academic qualifications in environmental and legal sciences. The professional fields were a split as shown: 32% in environmental sciences, 14% in engineering, while 30% were in legal sciences. The remaining 24% were administrative and other related fields. Last, the institutions employing respondents were mainly the Palestinian Environmental Quality Authority, 37%, and the Environmental Police, 48%.Table 3. Characteristics of Survey Respondents

Variable	Category	Count	Percentage
Gender	Male	46	46%
	Female	54	54%
Age (in years)	30 years or less	61	61%
	31-40 years	21	21%
	41-50 years	14	14%

Education Level	51 years or more	4	4%
	Intermediate Diploma or less	2	2%
	Bachelor's Degree	74	74%
	Graduate Studies	24	24%
Field of Specialization	Environmental Sciences	32	32%
	Engineering Sciences	14	14%
	Legal Sciences	30	30%
	Other/Specify	24	24%
Work Institution	Environmental Quality Authority	37	37%
	Environmental Police (Tourism and Antiquities Police)	48	48%
	Institution within the Palestinian Environmental Organizations Network	15	15%
	Other	0	0%
Work Experience in Environmental Field	5 years or less	42	42%
	6-10 years	24	24%
	11-15 years	21	21%
	16-20 years	7	7%
	21 years or more	6	6%
Work Governorate	Hebron	16	16%
	Bethlehem	21	21%
	Jerusalem	1	1%
	Ramallah and Al-Bireh	21	21%
	Nablus	13	13%
	Salfit	1	1%
	Tubas	2	2%
	Jenin	8	8%
	Qalqilya	4	4%
	Tulkarm	3	3%
	Jericho and the Jordan Valley	10	10%
Total	100	100%	

Findings

Analyzing the results of environmental crimes in the West Bank from the point of view of the respondents will provide answers to the type, causes, and

consequences of these crimes. In addition, the mean and variance for respondents' answers were calculated, and the results appear in Table 4. The overall mean for the reality of environmental crimes in the West Bank was 4.09 with a variance of 9.4, indicating a very high degree of consensus among respondents. It therefore follows that, in terms of practice, causes, motives, and consequences, there is a high incidence of environmental crimes in the West Bank. With an environmental crime of mean 4.14 and a variance of 10.4, which indicated that people almost agreed upon committing types of crimes as to being widespread, followed by consequences in damaging rates when crimes on the environment were committed: in their order with mean 4.10 and a variance of 11.0, showing respondents were in close agreement on very bad damage rates inflicted by the perpetrators. The last category refers to the reasons and motives for committing environmental crimes, with an average of 4.04 and a variance of 12.0. It confirms a high and significant presence of environmental crimes in the West Bank. These findings are in line with the results of Greife & Maume, 2020 work, which has shown various economic motives of environmental crimes, focusing on exogenous environmental factors such as economic, social and political pressures, and lack of legal mechanisms of enforcement.

Table 4. Mean Averages and Variance Averages of Respondents' Answers Regarding the Reality of Environmental Crimes.

No.	Area	Mean Average	Variance	Degree
B	Types of environmental crimes committed in the West Bank.	4.14	10.4	Very High
C	Causes and motives for committing environmental crimes in the West Bank.	4.04	12	Very High
D	Results (damages) resulting from committing environmental crimes in the West Bank.	4.1	11	Very High
Overall Mean Average		4.09	9.4	Very High

Types of environmental crimes committed in the West Bank, as found in the study, are represented in Table 5 below. From the table, the domain is represented by an average mean of 4.31 with a variance of 10.4, reflecting a very high degree of first-level significance and a moderate level of agreement among respondents on the existence of environmental crimes in the West Bank. This

means there is a greater level of environmental crime activity in the area. The results indicate that the most committed and practiced environmental crimes are the burial of hazardous Israeli wastes in Authority areas with an average mean of (4.38) with a variance of (15.8), rated very high, which was followed by the illegal digging of deep wells without necessary permits, with a mean = 4.20 and a variance of 20.1. The setting of fires in natural resources was the least committed environmental crime which was rated high at a second-level degree of significance with a mean of 3.98 and a variance of 22.6. It follows from the results that material gain, despite risks, is often the main motive for committing environmental crimes, especially the burial of Israeli waste. This could be attributed to the tough economic conditions that exist in West Bank due to the continuous occupation that has stunted economic growth, thus rendering a very high level of unemployment. This is in line with a study done by Rojas-Páez, (2017), who established that financial motives are usually the cause of negative environmental behaviour, which emanates from social pressure and economic deprivation.

Table 5. Arithmetic Averages and Variance Coefficients for Respondents' Answers Regarding the Types of Environmental Crimes Committed in the West Bank.

Types of Environmental Crimes Committed in the West Bank	Arithmetic Average	Variance Coefficients	Degree
1B. Burial of hazardous Israeli waste in Authority areas	4.38	15.8	Very High
2B. Smuggling expired pesticides from Israel to Authority areas	4	19.8	Very High
3B. Digging deep wells without the necessary permits	4.22	20.1	Very High
4B. Setting fires in natural resources (forests, pastures)	3.98	22.6	High
5B. Random disposal of industrial solid and liquid waste without adhering to regulations	4.17	17.4	Very High
6B. Encroaching on legally protected areas (nature reserves, natural pastures)	4.19	21.1	Very High
7B. Overexploitation of natural	4.1	18.8	Very

vegetation cover (forests)			High
8B. Overhunting of biodiversity (plants, animals, endangered birds)	4.09	19.7	Very High
9B. Air pollution through burning (rubber, plastic, petrochemical materials)	4.17	16	Very High
10B. Practicing industries related to stone (quarries, crushers, sawmills) near residential areas in violation of regulations	4.23	15.3	Very High
11B. Continuous noise pollution (industrial)	4.03	17.4	Very High
Overall, Degree	4.31	10.4	Very High

Table 6 below presents the results of the study in relation to causes and motives that led to committing environmental crimes in the West Bank. The total degree for causes and motives that commit environmental crimes in the West Bank, represented by an average of 4.03 with a variation coefficient of 12.0%, indicates that they reach a very high degree in the first level, while the degree of consensus among respondents about the strength of motives to commit environmental crimes is moderate. This means that the causes and motives mentioned above are realistic and significant factors in driving environmental crimes, which is an indication of clear environmental crime issues in the West Bank. Moreover, the respondents pointed out that the main cause leading to environmental crimes was the "lack of awareness of environmental crimes-meaning, penalties, and risks," with an average of 4.29 and a variance of 17.0. This is followed by "environmental crime as a means to reduce costs (waste disposal, obtaining wood)," which had an average of 4.14 with a variance of 18.5. The lowest-ranking motivations were "for a belief in the ability to achieve gains through environmental crime that cannot be achieved otherwise, " with an average of (3.78) and a variance of (24.0), and followed by "the desire to challenge the law to satisfy a sense of power," which scored an average of (3.81) and a variance of (26.8).

Table 6. Means and Variance Coefficients of Respondents' Answers Regarding the Causes and Motivations for Committing Environmental Crimes in the West Bank.

Causes and Motivations for Committing Environmental Crimes in the West Bank	Mean	Variance Coefficient	Degree
1C. Lack of awareness of environmental crimes (their meaning, penalties, and risks).	4.29	17	Very High
2C. Belief that protecting the environment is not a priority for human life.	4.1	20.1	Very High
3C. Belief that there are no crimes against the environment; it exists to meet human needs.	4.06	22.9	Very High
4C. The environmental societal culture is not resistant (neutral or encouraging) to environmental crime.	4.06	19.7	Very High
5C. The legal environment regulating environmental protection is weak (incomplete, ineffective).	4.07	22.4	Very High
6C. Laws regulating environmental violations (when available) are not deterrent.	3.95	21.4	High
7C. Desire to challenge the law to satisfy a sense of power.	3.81	26.8	High
8C. Belief in the ability to achieve gains through environmental crime that cannot be achieved otherwise.	3.78	24	High
9C. Environmental crime as a means to reduce costs (waste disposal, obtaining wood).	4.14	18.5	Very High
10C. Reducing costs of obtaining resources (water, wood).	4.1	16.4	Very High
Overall Degree	4.03	12	Very High

Table 7 illustrates the results pertaining to the extent of damage resulting from committing environmental crimes in the West Bank. Thus, it should be indicated that the degree of damage resulting from the cases of environmental crime in the West Bank, with a mean score amounting to 4.10, and a coefficient of variance equaled to 11.0%, presents a very high degree of the first level and the middle degree regarding the consensus for responses. It means that the environmental crimes existing in the West Bank have a great amount of damage. These damages are confirmed by the sample responses of the study, especially in the loss of biodiversity, both in flora and fauna, which ranked first with an average of 4.25 and a variance coefficient of 14.3, showing very high damage. The second damage involves the high costs of environmental protection, which came in at 4.19 on average. In contrast, a loss of livelihood sources for people had the lowest damage level, at 3.95 on average. In relation to environmental crimes in the West Bank, the highest rate of damage is connected with the loss of biodiversity as there has been encroachment onto green space and agricultural areas leading to their decline.

Table 7. Mean Scores and Variance Coefficients of Respondents' Answers Regarding the Results (Damages) Resulting from Environmental Crimes Committed in the West Bank.

Results (Damages) Resulting from Environmental Crimes in the West Bank	Mean Score	Variance Coefficient	Degree
1D. Increased environmental protection costs.	4.19	16.5	Very High
2D. Deterioration of water resources (quantity and quality).	4.18	15.7	Very High
3D. Disruption of official land use planning.	4.09	17.4	Very High
4D. Decline in vegetation cover (area) / decrease in vegetation cover area.	4.16	16.3	Very High
5D. Loss of biodiversity (plant and animal) as an economic and aesthetic value.	4.25	14.3	Very High
6D. Deterioration of air quality (pollution from smoke and dust).	4.1	16.4	Very High
7D. Deterioration of the environment as a habitat for human life.	4.16	18	Very High

8D. Loss of environmental aesthetics (loss of tourist and recreational characteristics).	4.09	16.7	Very High
9D. Unwanted environmental image for the community.	4.11	19.2	Very High
10D. Deterioration of civil peace due to (decline in relationships between community members, conflicts).	3.97	19.8	High
11D. Loss of resources for governments.	3.98	22.3	High
12D. Loss of livelihood sources for individuals.	3.95	22.6	High
Overall Degree	4.1	11	Very High

The status of environmental crimes has gained increased relevance as a result of their huge impacts, which are contributory to ecosystems and human health. According to Watson (2005), environmental offenses test legal systems and societies with implications for public health and on biodiversity. White (2013) extends this by exploring the criminal dimensions of ecological damage and the moral imperatives of environmental justice, while South (2002) considers how environmental crimes intersect with corporate and state actions, complicating their identification and prosecution. This is further compounded by corporate exploitation of loopholes in the law.

Barclay and Bartel (2015) provide an insight into how agricultural practices, while economically viable, result in environmental degradation through soil erosion and water pollution. Van Uhm and Nijman (2022) postulate that environmental crimes are intertwined with other grave crimes such as human trafficking and illegal resource exploitation, which make their enforcement quite complex. Shelley et al. (2011) discuss how public perception about environmental crimes informs policy and how a lack of awareness about environmental harm leads to feeble responses.

The most prevalent environmental crimes, according to Ruggiero (2020), come because of company greed and laxity in regulations; a good example is the BP oil spill. Casali et al. (2022) stress the importance of environmental forensic medicine and risk management in combating these crimes. According to Puxan-Oliva (2020), media and fiction shape perceptions about environmental crime.

Heckenberg and White (2020) argue for innovative research methodology, such as GIS and satellite monitoring, to improve enforcement. Katiambo (2021) dissects

how social media shapes environmental crime discourse, while Wright (2017) calls for uniform international enforcement to combat transnational environmental crime.

Table 8. Results of the Mann-Whitney Test for the Impact of Respondent Characteristics on Their Responses Based on Gender.

No.	Topic	Gender
1	Types of environmental crimes committed in the West Bank	0.171
2	Reasons for committing environmental crimes in the West Bank and their motivations	0.295
3	Results (damages) resulting from committing environmental crimes in the West Bank	0.279
Overall Score	0.175	

Table 9 shows that there are no significant statistical differences in the point of view of the respondents about environmental crimes in the West Bank regarding the variables: age, education, scientific specialization, workplace institution, years of experience in the environmental field, and work governorate. The significance level for all these variables was above 0.005, which means that characteristics do not influence the perception of the respondents. It is, therefore, accepted that the demographic and institutional factors have no significant influence on their responses. This is by Watson, 2005; White, 2013; South, 2002.

Further analysis in Tables 8 and 9 shows that the demographic and institutional characteristics of respondents do not influence their perceptions of the nature of environmental crimes, motivations, and damages linked to these crimes in the West Bank. This may also be because all the respondents have similar positions and experiences from their work, such as dealing with environmental law enforcement with the green police or monitoring environmental standards through the Environmental Quality Authority, or even observing environmental cases with Palestinian organizations. They generally share similar experience and professional background in the cases of Barclay & Bartel, 2015; Van Uhm & Nijman, 2022; Shelley et al., 2011.

The green police, in conjunction with judicial officers from the Environmental Quality Authority, represent an accumulated expertise and experience on matters preventing and enforcing environmental crimes. The

continued direct exposure to crimes committed against the environment promotes the standardization of perceptions of the subjects (Puxan-Oliva 2020; Heckenberg & White 2020). They also agree that the view is held by environmental specialists in Palestinian organizations due to the constant engagement in the monitoring and analyzing of environmental crimes and their impacts (Katiambo, 2021; Wright, 2017).

The structural functionalist theory applies since the converging roles of the respondents support the social values and help to deter environmental crime, as in the findings of Niu et al. (2023).

No.	Topic	Age in Full Years	Educational Level	Scientific Specialization	Workplace Institution	Years of Practical Experience in the Environmental Field	Work Governorate
1	Types of Environmental Crimes Committed in the West Bank	0.101	0.985	0.811	0.964	0.193	0.287
2	Causes and Motivations for Committing Environmental Crimes in the West Bank	0.198	0.728	0.03	0.284	0.256	0.054
3	Results (Damages) of Committing Environmental Crimes in the West Bank	0.682	0.361	0.12	0.061	0.492	0.426
Overall Score	0.252	0.529	0.171	0.169	0.254	0.312	

Conclusion

Environmental crimes in the West Bank are highly prevalent, influenced by political, economic, social, and security conditions, as well as the geographical distribution of Palestinian citizens. The most common crimes include the illegal burial of hazardous Israeli waste, unlicensed deep well drilling, and smuggling expired pesticides from Israel. These crimes are mainly linked to commercial-industrial practices, with a significant lack of environmental awareness driving their occurrence. Economic factors are the primary motivators, followed by social and legal influences. The consequences of these crimes include biodiversity loss, increased environmental protection costs, deterioration of water resources, and

reduced vegetation cover, all of which negatively affect Palestinian society and hinder governmental development efforts. There was no significant impact of respondents' demographic and institutional characteristics on their perceptions of environmental crimes in the region.

Recommendations

Therefore, economic plans and policies that aim to revitalize the economic aspects of Palestinian citizens in these areas, such as supporting appropriate agricultural and small environmental projects according to the present situation, have to be developed for the attainment of socio-economic balance that will guarantee the safety of the Palestinian environment.

The Palestinian government should be prioritized in the procedures of addressing and in the implementation of laws against environmental crimes committed in areas classified as "C" of the West Bank by plans and policies with civil society in these areas to serve the application of environmental laws in accordance with the legal and political situation there.

Awareness about the environment should be provided by the campaigns in the West Bank through educating the young generation via schools, religious places, and campaigns for the awareness of social media and mass media regarding environmental issues and concerns.

The Palestinian environmental policy should be considered in the light of different international conventions on the environment to which the Palestinian National Authority is a party, such as the CBD, the Basel Convention, and the Stockholm Convention on POPs, so that it can be truly effective with regard to the environmental situation in the West Bank under the current political context and minimize environmental crimes.

In all domains related to crimes of the environment, this will urgently need deeper and more accurate research and studies in all areas by scholars and experts who specialize in these two branches: crime and the environment, amid the growing new forms taken on in different manners by various types of environmental crimes in the present Palestinian framework and context.

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