Impact of Hazardous Natural Phenomena on Crime in the Azov-Black Sea and Caspian Regions

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Abstract: The article is devoted to the study of the impact of natural hazards on the quantitative and qualitative characteristics of crime in the coastal regions of the Azov, Black and Caspian Seas. The main research method is the method of analysis of statistical data of the Prosecutor General's Office of the Russian Federation, regional and municipal internal affairs bodies of Russia. An additional research method was the analysis of sentences in cases of crimes committed during or immediately after a natural disaster in the region. Based on the results of the analysis of the data, it was concluded that the influence of natural hazards on the dynamics and structure of crime in the South of Russia is insignificant, which is associated with the scale of the phenomena and the mobilization of state bodies. At the same time, it was established that natural disasters can act as a conducive condition to the committing of a specific crime.

1 INTRODUCTION

One of the main directions of criminological science is the study of the determination of crime, the influence of certain factors on the qualitative and quantitative characteristics of crime. These factors are diverse in their content - social and economic, psychological, organizational and managerial, etc. (Nomokonov, 2017). Research into the influence of natural factors on the quantitative and qualitative indicators of crime is gaining relevance (Weil, 2020). This is due, firstly, to the fact that natural disasters entail negative consequences in the form of damage or destruction of movable and immovable property, harm to physical and mental health and even death of a person. Thus, according to the Security Council of the Russian Federation, the annual economic damage caused by abnormal hydrometeorological phenomena is about 60 billion rubles (Rossiyskaya gazeta, 2020). Secondly, crimes committed during or immediately after natural disasters are characterized by an increased public danger, which is due to the circumstances in which the criminal act was committed. The increased public danger of the act and of the offender himself is that the person deliberately uses circumstances that facilitate the implementation of criminal intent and/or hide the traces of a crime (for example, seizes property from a helpless person; enters a damaged home or store with the intent of stealing). That is why the use of the circumstances of a natural disaster is considered by the criminal legislation as an aggravating circumstance for criminal liability - clause "л" of part 1 of Article 63 of the Criminal Code of the Russian Federation "Committing a crime in a state of emergency, natural or other public disasters, as well as during mass riots." The obligation to take this circumstance into account when imposing punishment is indicated in the Resolution of the Plenum of the Supreme Court of the USSR dated December 23, 1988, No. 17 "On the Consideration by Courts of Cases Related to Crimes Committed in the Context of a Natural or Other Public Disasters." Thirdly, such studies will help assess the effectiveness of the administration of the affected region and law enforcement agencies in the prevention and direct suppression of crimes in a natural emergency.
2 RESEARCH METHODOLOGY

As a rule, the influence of any factors on the parameters of crime is monitored according to statistical data. This study uses the official statistics of the Prosecutor General's Office of the Russian Federation and the internal affairs bodies on the number of registered crimes for the period from 2012 to 2020.

3 RESEARCH RESULTS

An analysis of the statistics of registered crime in the regions affected by natural hazards proved the absence of the influence of such phenomena on the dynamics and structure of crime in the coastal regions of the Azov, Black, and Caspian Seas, which is due to three factors: 1) negative consequences of natural phenomena in the form of human casualties and material damage is not as large enough to push citizens to commit a crime as, for example, during the 1988 earthquake in Spitak; 2) there is a set of measures of state support in Russia, which allows the affected population to cope with material problems for the first time after a natural disaster; 3) during a natural disaster, the forces and means of the Emergencies Ministry, the police and even the Armed Forces of Russia are mobilized.

4 DISCUSSIONS

Studies of the role of natural phenomena in the determination of crime began long ago. Back in the 19th century, the influence of meteorological and climatic factors on quantitative changes in crime was considered by C. Lombroso in his work "Criminal Man" (Lombroso, 2018). Scientists from different countries were engaged in identifying the correlation between meteorological conditions and the number of violent crimes committed by persons with mental disabilities, and the peak of such studies come down in the 20s of the XX century

Modern criminology has also raised the issue of the impact of natural disasters on crime in the affected region. As a result of the research, three main aspects of the impact of natural disasters on crime have been identified. Firstly, there is a sudden increase in the total number of detected crimes in the period immediately after the natural disaster in the affected region, while maintaining a high level of crime latency, reaching about 70-80% (Sahakyan, 2011). Secondly, crimes committed in the context of a natural disaster have an increased public danger. Thirdly, natural and social disasters are reflected in the structure of crime in the affected region. Thus, T.A. Zorina, based on statistics of initiated cases in the regions affected by natural and man-made disasters, revealed the following ratio of crimes by type: 35% - crimes against a person, of which most are murders; 26% - crimes against public order and public safety, mainly violations of traffic rules and vehicle operation; 20% - crimes against state authority, mostly expressed as negligence; 19% are crimes in the economic area, among which theft is dominant (Zorina, 2015).

However, these features are inherent precisely in large-scale natural disasters such as the earthquake in Spitak, which occurred on December 7, 1988, as a result of which, according to official data, 25 thousand people died, 140 thousand were injured, 514 thousand people lost their homes (Tumanyan, 1997).

The impact of hazardous natural phenomena typical for the coastal zones of the Azov, Black, and Caspian Seas on the dynamics and structure of crime in the affected regions has not been specifically studied. At the same time, these regions are of particular importance for the economic development of the country, being resort and international transit zones (Goryushina, 2020).

Therefore, the study of the influence of natural factors on the dynamics and structure of crime in these regions is of relevance, scientific, and applied significance.

If we look at the statistical data of the General Prosecutor's Office of the Russian Federation on the number of detected crimes in the Krasnodar Territory, the following changes in the dynamics of crime become obvious: 1) in July and August 2012, i.e. in the period immediately after the flood, there is a slight increase in the number of crimes in comparison with the month preceding the natural disaster - by 5% and 8.3%, respectively; 2) October 2014 shew an 11.7% increase in crime compared to September, at the end of which there was a flood; 3) at the end of October 2018, coastal areas were flooded, the number of detected crimes that month increased by 19%, but in November there was a decline of 38%; 4) on July 21, 2019, torrential rains flooded more than 50 yards, road sections and houses, the increase in crime this month compared to the previous one was 15.7%, and in August - 18.7%; 5) in the spring and at the end of August 2020, wildfires raged in the region, however, the increase in detected crime is recorded in March and then it decreases, although the fires continued in April; in August, the number of crimes increased by...
16.4% compared to July, and in September - by 10.7%.

Based on the abovementioned statistics, the number of registered crimes actually increases in a 4-week period immediately after a natural hazard. In the next month after the natural disaster, an increase in crime is recorded only in some cases.

However, a graphical representation of the dynamics of detected crimes in the Krasnodar Territory in the years when natural disasters occurred (Figure 1) leads to interesting conclusions.

Figure 1: Dynamics of crime in the Krasnodar Territory.

This graph demonstrates the regularity in the dynamics of crime in 2012, 2014, 2018, 2019, and 2020, regardless of the month in which a dangerous natural phenomenon occurred: a slight increase in March, almost imperceptible fluctuations until July, a slight increase again in August and a sudden increase of crime in October with the same rapid reduction in detected crimes in November.

It can be assumed that the jumps in the revealed crime are partly due to the beginning and end of the seasons of work of illegal labor migrants.

Therefore, hazardous natural phenomena do not have a significant effect on the dynamics of crime in the Krasnodar Territory.

This conclusion is also supported by the data of the territorial bodies of the Ministry of Internal Affairs of Russia. Thus, according to the Main Directorate of the Ministry of Internal Affairs for the Krasnodar Territory, the criminal situation in the region even improved in 2012 compared to 2011 (Report of the Head of the Main Directorate of the Ministry of Internal Affairs, 2012). In the Tuapsinsky District, which suffered the most from torrential rains in October 2018, a 7% decrease in registered crimes was recorded in 2018 compared to 2017 (Information and analytical note, 2018).

A similar dynamics of crime is shown in the Rostov Region, which is predominantly characterized by such dangerous natural phenomena as torrential rains, spring floods, and hurricane winds (Figure 2).

Figure 2: Dynamics of crime in the Rostov Region.

The Astrakhan Region and the Republic of Dagestan are located in the coastal zone of the Caspian Sea, but recently, the danger for these territories is not in sea phenomena, but torrential rains.

In Dagestan, dangerous emergencies caused by flooding mainly occur in May and June (Razumov et al., 2018). Based on statistical data, the region recorded a decline in the crime rate in May, and an increase only in June.

In mid-November 2020, torrential rains flooded the Dakhadayevsky, Derbentsky, Kizlyarsky, Novolaksky, Suleiman-Stalsky districts of the Republic of Dagestan, as well as the Caspian urban district and Makhachkala. In general, the crime rate in the republic in November and December 2020 decreased compared to the previous month. The crime rate in the affected municipalities themselves during this period changed in different ways. For example, according to the data of the territorial Departments of Internal Affairs in the Dakhadayevsky district in 2020 compared to 2019, there was a decrease in the number of crimes by 18%, in the Derbentsky district - by 11%, in Makhachkala, on the contrary, there was an increase in crime by 23.8% (Reports of the Heads of the Ministry of Internal Affairs, 2020).

Torrential rains that caused flooding in the Astrakhan Region were observed in May-June 2008, April-May 2011, and July 2012. According to Rosstat data for the first half of 2008, 1,747 crimes were registered in the region per 100 thousand people, which is 1% less than in the same period of the previous year; in the first half of 2011, 1,233 crimes were registered per 100 thousand people in the region, which is 12.9% less than in the same period of the previous year. In July 2012, the total number of...
detected crimes decreased by 10% compared to June, in August the decline continued.

There were no serious natural hazards in Kalmykia, after the 1995 flood, with the exception of a drought in the summer of 2020. At the same time, the natural disaster in 1995 did not affect the dynamics of crime and the number of crimes remained at a moderately low level: according to Rosstat data, there were 1,432 crimes per 100 thousand people. In August and September of 2020, there was an increase in crime relative to July by 8.3% and 16.2%, respectively.

At the same time, according to the prosecutor's office of the Republic of Kalmykia, the increase in the total number of crimes in 2020 was due to an increase in the number of mercenary crimes committed using information and communication technologies, and the criminals themselves are often geographically located in another region. It is interesting to note that in the districts where a drought emergency was declared - Iki-Burulsky, Lagansky, Chernozemelsky, Priutensky, and Tseliny - a decrease in crime was recorded compared to 2019 (Prosecutor's Office of the Republic of Kalmykia, 2020).

Thus, the analysis of the statistical indicators of the detected crime proved the absence of the influence of hazardous natural phenomena on the dynamics of crime in the coastal regions of the Azov, Black, and Caspian Seas.

We believe that this circumstance is due to three reasons. Firstly, the negative consequences of natural phenomena in the form of human casualties and material damage is not as large enough to push citizens to commit a crime, as, for example, during the 1988 earthquake in Spitak.

Secondly, there is a set of measures of state support in Russia, which allows the affected population to cope with material problems in the early days after a natural disaster. Thus, for example, the Decree of the President of the Russian Federation dated July 17, 2012, No. 1015 "On Measures to Eliminate the Consequences of a Natural Disaster - Flood in the Krasnodar Territory" instructed to pay the families of victims one-time financial assistance of 1 million rubles both from the federal budget and from the regional budget, i.e. 2 million rubles.

Finally, during a natural disaster, the forces and means of the Emergencies Ministry, the police and even the armed forces of Russia are mobilized. In particular, in Krymsk in 2012, 275 police officers, 100 servicemen of internal troops, 65 representatives of the Cossacks, 36 units of official vehicles were involved in stabilizing the situation in areas affected by flash floods; the police provided security for the regional post office, which received funds to pay compensation to the victims; to prevent theft, police officers surveyed 4,506 households; the conditions of storage of weapons and ammunition were checked at 583 owners of weapons, 8 units of hunting firearms were handed over for temporary storage (Chuklina, 2013).

Natural disasters also did not have an impact on the structure of crime in the studied regions. Thus, in the Apsheronsky and Tuapsinsky districts most affected by the floods on October 24-25, 2018, there is a decrease in certain categories of crimes: in the Apsheronsky district in October 2018 compared to 2017, the number of economic crimes decreased by 21.3%, in November - by 20.8%, and in December - by 17%; in the Tuapsinsky district there was a decrease in fraud by 30%, robberies - by 31%, counterfeiting - by 27%. The number of murders and attempted murders, robberies, assaults related to robbery, larceny, and thefts of vehicles also decreased (Information and analytical notes, 2018).

The most difficult situation with wildfires that raged in August 2020 in the Krasnodar Territory was in Anapa (Kubanskie Novosti, 2020). However, this circumstance did not negatively affect the structure of crime: the number of serious and very serious crimes, as well as the facts of intended infliction of grievous bodily harm - by 22.7%, assaults related to robbery - by 18.2%, thefts - by 19.9 %, including from apartments - by 52.7% and from cars - by 14% (Information and analytical note, 2020).

At the same time, the analysis of judicial practice made it possible to conclude that dangerous natural phenomena can cause the commission of certain crimes.

In criminology, crimes related to natural and social disasters are divided into two groups: 1) crimes that create conditions for the occurrence of a catastrophe as a result of the violation of rules and regulations (negligence, environmental crimes, violation of safety requirements); 2) crimes committed in an environment of natural or public disaster (murder, violations of traffic rules and vehicle operation, theft) (Zorina, 2015).

With regard to natural disasters, it is more correct to talk about the criminal failure to prevent negative consequences due to a careless or negligent attitude to one's duties, since it is impossible to cause a natural disaster by the action or inaction of persons.

In the coastal regions of the Azov, Black, and Caspian Seas, this group of crimes is represented by negligence (Article 293 of the Criminal Code of the Russian Federation), i.e. non-fulfillment or improper performance of official duties, resulting in the
infliction of large/extremely large damage, significant violation of the rights of citizens and organizations or the legitimate interests of society and the state, the infliction of grievous bodily harm or death of one or more persons.

The second group of crimes includes criminal offenses committed during or immediately after a natural hazard. When characterizing these crimes, it is important to pay attention to the form of guilt - intent or negligence.


Crimes against the person caused by dangerous natural phenomena are extremely rare in judicial practice. A distinctive feature of such criminal acts can be called the stressful state of the perpetrators in connection with the situation of a natural disaster or its consequences.

When committing thefts, dangerous natural phenomena act as a condition that facilitates the commission of a crime and/or hiding traces. For example, a fence collapsed by a hurricane wind and broken glass windows facilitate illegal entry into someone else's home.

Fraud, forgery by an official, and the use of forged documents are committed to obtain compensation payments or avoid material liability under the guise of force majeure - a natural disaster.

Abnormal weather conditions often contribute to negligent crime, creating a dangerous situation that entails negative consequences if there is insufficient care or negligence of the person in charge - for example, the sinking of a ship in a storm.

5 CONCLUSIONS

Thus, based on the analysis of statistics and judicial practice of the general jurisdiction courts of the Krasnodar Territory, the Rostov Region, the Republic of Dagestan, the Astrakhan Region, and the Republic of Kalmykia, two main conclusions can be drawn: 1. hazardous natural phenomena do not affect the dynamics of registered crimes and quantitative changes in the structure of crime in the affected area; 2. 2 types of crimes related to dangerous natural phenomena should be distinguished in the structure of the affected region: 1. criminal inaction, expressed in the failure to prevent the negative consequences of natural emergencies (negligence), 2. crimes committed during or with the use of a natural disaster environment (intentional crime - the infliction of grievous bodily harm, theft, fraud, forgery by an official, the use of forged documents and negligent crime - the provision of services that do not meet safety requirements, violation of traffic safety rules and transport operation, road traffic offense).

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REFERENCES