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Case: flood in 2024 – Is it just the fault of the nature?

Introduction:

In September 2024, Lower Silesia was hit by a severe flood caused by intense rainfall. The most difficult situation occurred in the middle of the month when swollen rivers, especially in the Sudetes and Kłodzko Valley regions, inundated cities such as Kłodzko, Bystrzyca Kłodzka, and Łądek-Zdrój. Water entered hundreds of homes, destroying infrastructure and forcing residents to evacuate. In many places, the water level exceeded alarming states, and the damages were compared to the millennium flood of 1997. Nine people lost their lives (this is the only number of known death. People predicted that there are more), and thousands were affected. The flood gradually receded after September 18, leaving behind massive destruction. But, is the intense rainfall was the only reason that caused such a damages?

Problem:

During the flood in September 2024, the situation in Stronie Śląskie was particularly alarming, where there were serious problems with the dam on the Biała Łądecka River. The structure, despite earlier signals about the need for modernization, proved to be insufficiently prepared for such a large influx of water. The dam began to leak, and at the peak moment, it was unable to hold back the flood wave. As a result, considerable areas of the city and other nearby towns were flooded, and residents had to be evacuated in haste. The shortcomings in flood protections affected not only Stronie but also many other localities in Lower Silesia. Neglected embankments, outdated warning systems, and delays in the implementation of investment plans made local communities virtually defenseless against the natural elements.

Increasingly, there has been talk about the responsibility of the state. Although plans were declared to expand and modernize the flood control system after the flood in 1997, many of these plans were never fully realized despite reports. Experts and residents have accused the authorities of inconsistency, sluggishness, and ignoring warnings from hydrologists. For many, this flood was not only a natural disaster but also a result of years of neglect by state institutions. The dam in Stronie Śląskie was also (probably) excavated, which significantly weakened it. It is unclear who authorized this or what the reason was, but it greatly weakened the entire structure.

The government was also well aware of the forecasts. They saw how bad it could be, but they downplayed the issue and considered the information to be "not very

alarming." The problem also lies in the trivialization of the relocation of residents from villages that should be used as retention reservoirs. I believe that safety and human life are the most important, which is why, in my opinion, the decisions regarding persuading people to relocate were too lenient. Perhaps we wouldn't have suffered so many casualties in terms of both lives and material losses.

Solutions:

To better prepare for future floods, both the Polish government and local communities must take coordinated, long-term actions. The government should prioritize the modernization of flood protection infrastructure, including the reinforcement of dams, levees, and drainage systems. The protection and quality control of dams and reservoirs should also be continuously monitored and improved, and any acts of vandalism against these structures, or reconstruction and dredging without reliable consent from the Polish water management authority should be severely punished. Investments in early warning technologies are also crucial—real-time alerts through mobile networks and public warning systems can save lives. Urban planning must be reformed to restrict development in flood-prone areas, while existing infrastructure should be regularly maintained to prevent blockages and overflows.

Equally important is the need for public education. Citizens should be informed about flood risks, evacuation procedures, and the importance of having home emergency kits. Local communities can play an active role by participating in planning meetings and supporting initiatives for better environmental and water management. Individual households must prepare by developing emergency plans, staying informed through official sources, and taking simple protective measures, especially in high-risk zones.

Ultimately, a combination of state responsibility, continuous investment, and active civic engagement is essential. Without clear accountability and sustained effort from both sides, future floods will continue to expose the same vulnerabilities witnessed in 2024.

Conclusion:

In summary, the flood in 2024 revealed critical weaknesses in Poland's preparedness for crisis situations such as floods. Strengthening infrastructure, improving warning systems, and implementing better spatial planning are essential responsibilities of the government. At the same time, citizens must be kept informed, prepare individually, and engage in local risk management. Without joint and sustained efforts, similar disasters will continue to cause losses and damages that could be prevented. We would not have avoided the flood, as it is a natural disaster, but

certainly, such a great tragedy and the significant losses suffered by the Kłodzko Valley and Lower Silesia could have been prevented.