THE FLOOD OF 57 AND THE DANA OF 24

RAYAN ADAM

BOUKDIR LEBRIGUI

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WHAT HAPPENED AND HOW DID IT UNFOLD:

- On **October 13 and 14, 1957**, the city of **Valencia** suffered one of the worst floods in its history. During these days, **record-breaking rainfall** reached up to **630 liters per square meter**, almost double the highest amounts recorded in Europe at the time. The **Turia River overflowed twice within 12 hours**, flooding large parts of the city.
- The water reached **up to five meters (16 feet) high** in some areas, **destroying homes, businesses, and streets**. Many people were trapped inside their houses, and emergency services were overwhelmed with rescue requests. The flood caused a massive blackout, cutting off **electricity, gas, and clean water supplies** for days.

WHAT HAPPENED AND HOW DID IT UNFOLD:

- Between October 28 and November 4, 2024, a **Depresión Aislada en Niveles Altos (DANA)**, also known as an isolated high-altitude depression, hit Spain, mainly affecting the **Valencian Community**. This weather phenomenon caused **heavy rain, strong winds, and severe flooding**, damaging homes, roads, and essential services.
- The storm developed when **a mass of cold air at high altitudes clashed with warm, humid air from the Mediterranean**, creating an **intense and prolonged weather system**. Some areas recorded over **300 liters of rain per square meter in just 24 hours**, causing **rivers to overflow, landslides, and extensive power outages**. Emergency services received **thousands of distress calls.**

CONSEQUENCES OF THE FLOOD :

- The disaster had severe consequences:
- **Loss of lives**: **Official reports counted 81 deaths**, but some sources estimate the real number was **closer to 300**.
- **Destruction of homes**: Around **5,800 houses were destroyed**, leaving **4,500 families homeless**.
- **Infrastructure damage**: Bridges, roads, and railways suffered **major destruction**, cutting off transportation in the region.
- **Economic impact**: About **75% of businesses and industries** in the city were affected, stopping much of Valencia's economic activity.

CONSEQUENCES OF THE DANA:

- The impact of this storm was severe:
- **Loss of lives**: **227 people died**, many of them elderly citizens over 70 years old.
- **Infrastructure damage**: Roads, bridges, and railways suffered **significant destruction**, disrupting transportation and communication.
- **Cultural heritage affected**: Historic buildings, such as **the Alqueria Nova in Alfafar**,family businesses were either damaged or completely destroyed.
- The **2024 DANA floods** caused **serious economic problems** in Spain. The government spent **over €1 billion on aid**, and the disaster led to **a 0.2% drop in economic growth**, affecting **many businesses and jobs**

MEASURES TAKEN AND HOW IT COULD HAVE BEEN PREVENTED:

- After the disaster, authorities and citizens took important actions to recover and prevent future floods:
- **Immediate response**: **Valencian citizens organized volunteer groups** to rescue people, provide food, and shelter the homeless. The local government **declared a state of emergency** and requested help from the national government.
- **The "Plan Sur" project**: In 1958, the government approved **a massive engineering project to prevent future floods**. This plan involved **diverting the Turia River** to the south of the city, away from populated areas. The construction started in 1964 and was completed in 1973. This project protected Valencia from future flooding.
- **Urban improvements**: After the flood, authorities rebuilt and widened **bridges, roads, and drainage systems** to handle heavy rains more effectively. The city also built **new neighborhoods** to relocate those who had lost their homes.

MEASURES TAKEN AND HOW IT COULD HAVE BEEN PREVENTED :

- After the disaster, different actions were taken to **manage the emergency and rebuild affected areas**:
- **Immediate response**: The Spanish government **formed a crisis committee and deployed the Military Emergency Unit** to assist in the most affected regions. Spain also activated the **European Civil Protection Mechanism** to receive international support.
- **Financial aid**: The government approved **direct financial assistance** of **€60,000 per affected household** and mobilized **European funds** to rebuild infrastructure.
- **Improvements in emergency management**: Authorities identified **failures in weather forecasting and communication**. As a result, **the Valencian government** improved **early warning systems and public information**.

CONCLUSION :

- The **1957 Valencia Flood** and the **2024 DANA** were two of the worst natural disasters in Spain's history. Both events caused **serious damage**, including **loss of lives, destruction of homes, and economic problems**. However, they also led to **important changes**. After the 1957 flood, Valencia built the **Turia River diversion**, which helped prevent future disasters. The 2024 DANA showed the need for **better emergency response systems and stronger infrastructure** to handle extreme weather.
- These disasters remind us that **climate change is increasing the risk of floods**, so cities must **prepare better**. Investing in **flood prevention, better drainage systems, and early warning systems** can help reduce damage and save lives in the future.
- **Sources**
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