Being passionate about nature ever since I was a kid, my mind could not attain peace each time when I learnt about the horrendous news that our local landfill, in home country, caught into a terrible fire. The fire took almost 4-6 weeks to be put out and a lot of damange has been caused to the environment and health hazards were on rise; at the same time, the air quality has been compromised to a great extent.

While the exact cause of the fire has not been confirmed till date, other factors such as the accumulation of combustible materials, spontaneous combusting due to excessive methane gas produced by decomposing waste or potential arson have been suspected.

My strong passion for data analytics and the environment made me go through some research on how this situation could have been prevented. While it is kinda without doubts that the methane gas and combustible materials were the reason why the fire seemed to be never-ending. So my big question is maybe with the use of data analytics, this situation could have been prevented to some extent.

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The Mare Chicose Fire: Could Predictive Analytics Have Saved Mauritius?

Ever since childhood, I’ve had a deep appreciation for nature, but nothing could prepare me for the devastation that unfolded when Mauritius’ only landfill, Mare Chicose, erupted into a catastrophic fire. For nearly **six weeks, towering flames and thick, toxic smoke engulfed the area**, endangering not just the environment but also the health of thousands. **Air quality plummeted, hazardous emissions soared, and the ecological damage was immeasurable.**

To this day, the exact cause of the fire remains uncertain. However, mounting evidence suggests that a combination of **highly combustible waste, excessive methane buildup from decomposing materials, and possibly even arson** fueled this relentless blaze. The question that haunts me is: **Could this disaster have been prevented?**

As someone deeply passionate about both environmental protection and data analytics, I began researching whether **predictive analytics and real-time monitoring** could have mitigated—if not entirely prevented—this catastrophe. If methane accumulation and flammable waste acted as the fire’s ticking time bomb, could **data-driven insights have defused it before disaster struck?**