Risk Communication in Wildfire Prevention and Preparedness

- A Minor Field Study in the Vredefort Dome, South Africa

The African continent has a long history of fires and is therefore sometimes called the 'fire continent'. In 2021, more than 5 million hectares of land burned in South Africa alone. Risk communication plays an important role in preventing these fires by raising awareness about the steps individuals and communities can take to reduce the likelihood of veldfires occurring and their consequences. This is what was investigated in the study.

Imagine that you own land in an area that is frequently hit by wildfires. Not a year goes by without at least one wildfire raging in the area and you, a simple farmer, are completely responsible for managing the situation. If a fire starts on your property, YOU must stop it. If the fire spreads to another property, YOU are responsible. Luckily you are a member of the Fire Protection Association (FPA), cooperative formed by the landowners in your area that collaborates to manage the risk of fire. They provide their members with equipment, training, and risk communication in order to reduce the number of wildfires and the damages they induce. However, you are annoved with your neighbor who is not a member of the FPA, not only because it is a risk for her, but because she also puts you and other members at risk.

This is the reality of the community in the World Heritage Site the Vredefort Dome in South Africa. One way to handle risks with wildfires is to spread information and knowledge through risk communication. This is when experts and the general public exchange information prior to, during, and after a fire event. The study investigated how wildfire risk is communicated to the Vredefort Dome Community. The focus was communication about wildfire prevention and preparedness. This was done by performing interviews with landowners and risk

communicators in the area as well as conducting a survey.

The study found that the main communicators for risk communication in the Vredefort Dome are two FPAs and Working on Fire (WoF). WoF is an organization that collaborates with the FPA and runs awareness programs as well as fights fires and implements preventative measures such as prescribed burns and fuel load reduction. The main communication channel used is WhatsApp where the FPA manages group chats and sends out risk information. They also hold annual meetings for their members where they evaluate the fire year. Additionally, the meetings are used as an opportunity for the members to give feedback. WoF holds fire awareness meetings and school workshops with the aim to raise awareness about fire safety in the community.

So how well does this risk communication work? Does it work as intended? The risk communication in itself is generally in line with risk communication theory; various channels are used, the communicators are trusted, feedback is encouraged, and the messages are clear and adapted with the recipient in mind. The main problem with the risk communication is not the risk communication per se but that not all groups of the community are included. This is a result from that you must be a paying FPA member to be included in the risk communication, which some do not want to or cannot afford. As a consequence, considerable parts of the community are not reached by any risk communication. When it comes to wildfires it just takes one negligent person or one piece of unprotected land for fires to spread extensively. Remember your neighbor?

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