

“Are we really prepared in Italy and in Europe to face future major crises resulting from natural or man-made disasters?”

A Global Conversation With Prof. Agostino Miozzo

Predictability of natural and man-made disasters

Prof. Miozzo with Ph.D. in genealogy has worked in different sectors of Italian government through years, his area of expertise is on the humanitarian aspect of disaster management. He also teaches at Boston University.



The leading question covered during this global conversation was “are natural and man-made disasters predictable?” He immediately declares that answering such question is far more complicated than yes or no since we can almost never know for sure when something is going to happen, even if we are able to predict the possibility of an upcoming hazard. In principle the natural disasters are predictable but the world is not untouched. We can conclude that man-made disasters such as technological or Fukushima nuclear plant are not predictable.

This is due to the engineering behind these infrastructures. An ideal engineer while planning to build such facility would focus on risk assessment scenario considering the worst case scenario, but if that’s not the case, the engineer would focus on the portrayal of minimum risk in order to earn the maximum profit. We know that security and risk measures are always accompanied by costs and this is in contrast with the interest of stakeholders, they want the minimum expenses for maximum security, so how are we to reconcile between these two?

Examples of action

As a matter of fact crisis and man-made conflicts are predictable to the extent that they don’t happen instantly but rather through a period of time and are build-up. There are numerous international organizations studying and elaborating on natural disasters, the most well-known might be United Nations. From this extensive research, such organizations have done, we have enough knowledge to reduce vulnerability and risk for people who live in the more exposed area,

therefore we do have enough knowledge to reduce the hazardous impacts of these risks, even if we are not equipped with enough capital to invest on them.

Considering the case of a very common natural hazard we look into flash flood which can happen anywhere in the world. This kind of flood can occur in a short time-frame and strike us without further warning. Certain conditions can worsen the effects of the flood, such as: building frail bridges in course of the river, building houses in an area close to the river bank and therefore raising the vulnerability of such housing, lack of sufficient surveillance in order to establish an early warning system. Local authorities should consider that there is a high degree of predictability in time close to the disaster, for those who are already familiar with the conditions in the local scale. With some effort, the least they can do is to inform people in advance about hazards approaching the area.

Urban development

As a matter of fact, it is certain that prevention of disasters is usually less costly than reconstruction. However, from the point of view of politicians, it is not very appealing to spend the budget on prevention strategies. This is due to the fact that showcasing of seeming like the savior after a disaster, is much stronger than prevention. Nowadays people have taken a wrong approach to nature. For instance, in ancient Rome, Romans used to build perfectly engineered bridges and take care of the river Tiber as a source of life. In Genova and Liguria, they have fully covered the river to create more space in order to build houses. These actions will increase the chance of non-predictable disasters. There are many other examples of similar mistakes to achieve short-term convenience.

Almost one million Neapolitans are living in what is called the red area, meaning they are particularly exposed to the possible eruption of the Vesuvius. Even though they have been made aware of this, they are not ready and prepared for such event. People possibly stay in the area around Pompeii because their sources of income are ironically dependent on the remains of an ancient disaster. Without noting that the same hazard is endangering their lives.

Disastrous implications

What is suggested is to start raising the awareness of people and warn them about the possible scenarios. Taking the case of Africa, many villages are located in red areas close to rivers, therefore exposed to being flooded. This is simply because of the lack of a better option on where to build their houses. In the case of Hurricane Katrina which was slowly formed and built up, the American government knew very well about the risk of the hurricane but still more than 2000 people died. This implies how significant the gap is between the knowledge and reaction. Additionally, it shows that authorities have a weak and limited reaction toward such events. In the report released by the Senate, it is even mentioned that: “there was a gap in the chain of commands...” by which they mean that there was a flawed system not being able to differentiate between Order and Advice. The population of New Orleans had received an advice to leave, which was possible for most of the privileged people. In the end, there were reported more than 2000 dead people mostly belonging to marginalized and underprivileged people.

When later president Bush asked people around the world for humanitarian assistance Italy contributed with 60 tonnes of medicine and food. This aid turned out to be a useless operation. Due to the absence of FDA green light and they were not able to coordinate the assistance, and all of it was destroyed.

Disasters are predictable, what comes next?

What must not be forgotten is that a fundamental factor of this is money. Due to simple warning systems and prevention methods is very effective, in contrast to reconstruction methods. After all, it is easier to continuously clog small recurring leaks in a wall, than an enormous one. There are many mistakes made in taking simple prevention methods for the sake of short-term convenience. One would probably need to extensively explain the situation to every individual in the society in order to reduce vulnerability in local populations. The problem of how, when, where, or rather in coordination is something that nations, NGOs, and people still struggle with.

So who should have the real responsibility of a Natural Disaster or Global Crises? First of all, we should all keep in mind that the cost of Human Life is immeasurable. Even though some allow themselves to be distanced from this norm. We also now know that both natural and man-made disasters are in fact predictable to some degree. Thus the responsibility of awareness lies on all while informing lies on experts. Finally, proper disaster management procedures should be

organized by authorities, NGOs and those who have the means and knowledge to execute it optimally.

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