



EDITORIALE

LEADER

by

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ISCHIA (ITALY): A MULTIRISK ISLAND

At dawn on 26 November 2022, after a few hours of heavy rain, a landslide ravaged the area of Celario, in the municipality of Casamicciola Terme, on the island of Ischia (Campania, Italy). In just a few minutes, the landslide destroyed homes, roads, and terraced crops, killing 12 people, some of them children. After several days of search operations, some of the bodies, which had been swept tens of metres away from their homes, were found under mud and debris.

The landslide, which may be classified as a debris flow, originated from the slope just below the top of Mount Epomeo. In its fast movement downhill (at a presumed speed of nearly 100 km/h), it entrained hundreds of thousands of cubic metres of debris, earth, and trees, devastating everything in its path. Eventually, the debris mass, converging into roads and gullies, flowed into the sea, near the local harbour.

In the last century, 42 people died as a result of floods and landslides in various parts of Ischia. In particular, in 1910, again at Casamicciola Terme, 11 bodies were found buried by mud. However, if we expand the time window of our investigation and rely on thorough historical studies, we discover that the island has recorded as many as 70 flood and landslide events since 1220. All of these events were reported to have caused damage to people and property. In some of them, the number of casualties reached about 700 (July 1228, municipality of Lacco Ameno).

Ischia has a high concentration of geological risks. It is an island of volcanic origin, whose recent activity is testified by many thermal springs, for which it is famous all over the world, and it is a popular tourist destination. The recent earthquake in Casamicciola (2 casualties and many damaged homes), in 2017, reminds us that it also has a high seismic risk. In this regard, it is worth mentioning that another earthquake, again in Casamicciola, in July 1883, caused vast devastation, with 126 killed and many injured. Since then, the Italian expression *sembra proprio una casamicciola* (it really looks like a casamicciola) has entered into common language to define a situation of chaos and destruction.

Another type of historically documented risk on the island is that of a tsunami. There are historical records, albeit not very detailed, of tsunami events that affected the coast of the island after both landslides reaching the sea and earthquakes.

All of the above suggests that Ischia is an area with a high level of geohazards, as its geological history is very recent (150,000 years, i.e. a very short time with respect to the geological timescale).

Its geohazards are associated with high risk exposure, which is due to urban development in the recent decades, with an impressive density of extremely vulnerable buildings, i.e. homes built with techniques and materials of very poor quality. This is why Ischia is one of the areas with the highest geological risk in Italy and in the world.

At this stage, I might dwell on the urban sprawl that has occurred on the island in the past few decades, on the total lack of urban planning and building control, and on the nearly total absence of risk awareness among its citizens, in spite of the frequent landslides, floods, and earthquakes that have taken place there almost on a yearly basis, albeit with variable intensity.

But I will not do so because, whenever such events occur on the island of Ischia, polemics arise about illegal buildings (maybe there are, maybe there are not); this is a very tricky issue.

Hence, my appeal for those responsible to accept their failings will remain unspoken: faced with yet another disaster hitting the island of Ischia, remaining silent is a better and more sensible approach. Nevertheless, I will return to some of the points made by the Minister in charge of Civil Protection, appointed just a few days before the disaster.

In a speech to the lower house of Parliament, he pointed out that the tragedy of Ischia compels us, both morally and politically, to urgently improve our understanding not only of its causal factors, but also of the multiple aspects related to better identifying a really integrated and efficient administrative, regulatory, and legislative framework for risk prevention, and a strategy founded on a comprehensive approach to risk forecasting and permitting action



to be taken wherever and whenever it is necessary and urgent. He also added that there can be no prevention without forecasting tools.

Using up all my optimism, I would like to believe in this further commitment taken by a policy-maker. However, adding

a touch of pessimism to a genuine sense of realism, I fear that there will be other disasters and victims on this island, which is so beautiful but is also so affected by geohazards and, above all, damaged, scarred, and spoiled by human greed and blindness.