

The natural disasters and the urban asset modifications: the Melito Irpino case history.

Sabina Porfido (1) and Efsio Spiga (2)

(1) CNR, IAMC, Naples, Italy (sabina.porfido@iamc.cnr.it), (2) Independent Researcher, Avellino, Italy

The history of Melito Irpino, a small village in southern Italy is particular, though not unique in its genre. The development of its urban asset was, in fact, strongly affected by natural disasters such as hydrogeological and seismic events, which determined its transfer to another location. Due to its landslides and flooding it has been included since the beginning of the twentieth century among the unstable centers to be consolidated. The landslides were caused by peculiar geological characteristics of which the substrate essentially originates from different consistency Flysch elements. From the seismic point of view, Melito Irpino is part of the first category of the new seismic classification of the Campania Region. The most devastating earthquakes that damaged Melito date back to December 1456, which hit central and southern Italy and 5th June, 1688 which had the Sannio as epicentral area, both with $10 = XI$ MCS and $M > 7$ [1456: $10 = XI$ MCS, $M_w 7.2$; 1688: $10 = XI$ MCS, $M_w 7.0$]. During the twentieth century, it was involved in two other disastrous earthquakes that caused serious damage to the village in 1930 with an intensity VIII and in 1962 with $I = IX$ MCS and VIII ESI-07 intensity. The earthquake of 21st August 1962 was fatal for the village of Melito. In December of the same year it was left with 2182 inhabitants and 800 houses, most of which were unstable, 300 were to be demolished, 50 unrepairable and 200 were still uninhabitable yet repairable. From a geological point of view the situation turned even more dramatically when the whole valley area stretching from the old Ufita River bridge and the historical center of Melito was affected by a series of large slope instability such as rock falls, complex rotational slip, de facto complicating an extremely compromised situation. This was sufficient to encourage the transfer of the entire village in another location. After more than half a century and considering the effects of two important earthquakes in 1962 and 1980, Melito now features as rebuilt 2 km far from the original historical centre. However, all measures of reconstruction have limits, positive and negative aspects. The modern urban aspect seems to be far away from the original rural connotation, which is a loss for the identity of the village. The aim of the issue is to pay attention to the reconstruction of other villages affected by similar natural disasters. How and when this should be done is a delicate and complex priority of reconstruction, which should consider the entire social and economic aspect.

References

Porfido S., Spiga E. (2016) Prima che si perda la memoria: viaggio iconografico in Irpinia tra dissesti e terremoti. Before memory is gone: an iconographic journey among the landslides and earthquakes of Irpinia, Italy. In : Vecchi e nuovi Media per l'Immagine del Paesaggio / Old and New Media for the Image of the Landscape ISBN 978-88-99930-01-1