

DESERTIFICATION OR RESILIENCE AND SUSTAINABILITY RESEARCH FOR THE VESUVIUS AREA?

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DESERTIFICATION

The evacuation plan promoted by the volcanologists since 1995 requires:

- Deportation of 750,000 people from 24 communities surrounding the volcano.
- Prediction of eruption 3 weeks in advance based on unknown science.
- Resettlement of evacuees all over Italy with no resettlement plans.
- Abandonment of the evacuated territory.
- Destruction of Vesuvian culture.
- Opening of the evacuated territory to speculators.
- Utilization of unreliable transportation systems (trains).
- Encouraging decision makers to postpone indefinitely territorial interventions.
- High risk of draining national treasury with false alarms.

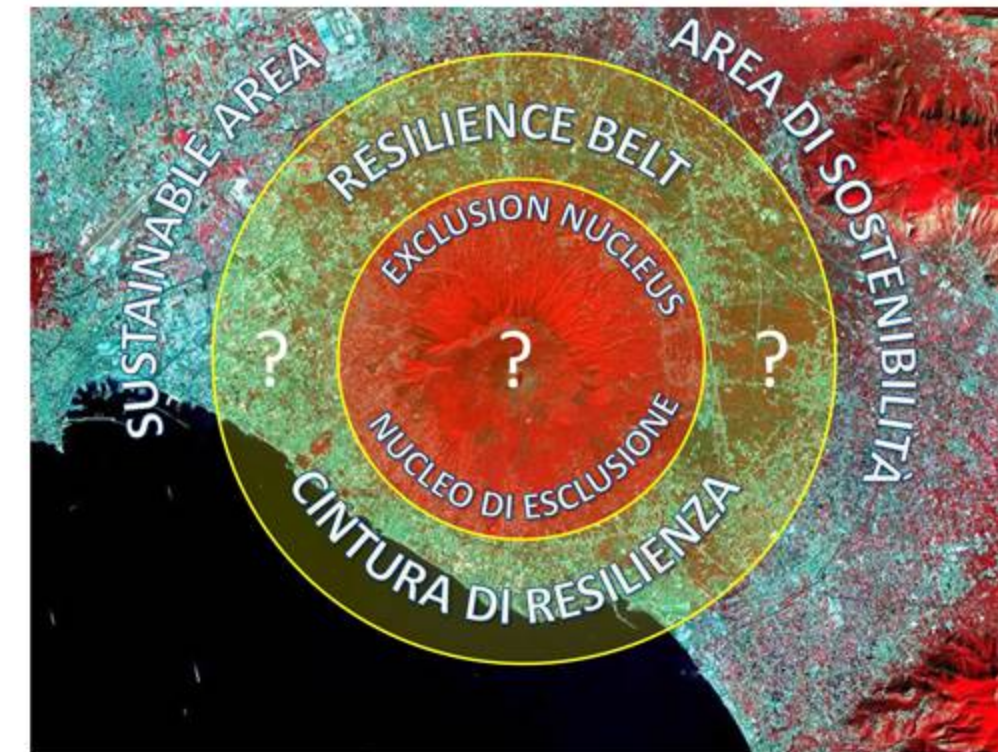
Such a desertification strategy is neither resilient nor sustainable.



RESILIENCE AND SUSTAINABILITY

Resilience and sustainability from future eruptions require:

- Continuing close habitation of the population with the volcano to preserve the culture.
- Accurate identification of volcanic hazards (earthquakes, tephra falls, pyroclastic flows, bombs and missiles, mudflows, tsunamis), vulnerabilities (civil construction practices, infrastructure systems, cultural patrimonies), exposed values (with particular regard to people, strategic buildings, schools, heritage).
- Redefinition of the danger zone around Summa-Vesuvius as follows:



EXCLUSION NUCLEUS

(nucleo di esclusione), prohibiting all future human settlements and discouraging existing ones.

RESILIENCE BELT

(cintura di resilienza), housing most of the current population, where all structures conform to specific construction codes.

SUSTAINABLE AREA

(area di sostenibilità), allowing for both sustainable practices and temporary resettlements of the "resilience belt" citizens.

- The built environment construction codes for the population of the danger zone based on plinian eruption scenarios, scenario-based seismic hazard assessment and zonation, dynamic structural analyses, global volcanic simulations modeling of thermo-fluid dynamic eruption processes.
- Volcanic risk information and education involving an effective volcanic risk information campaign and active public preparedness strategy for the exclusion nucleus, resilience belt, and sustainable area regions surrounding Summa-Vesuvius, and a Volcanic Risk Education Safety Program implemented in all schools located within each of the above areas surrounding the volcano.
- Political Authorities and scientific community able to produce a "memorandum of understanding" that univocally establishes an effective collaboration.
- Periodic progress reports that keep the populations informed on the improvements leading to the resilience and sustainabilities of the communities exposed to the risk.