

Mass Evacuations in Natural Disasters

The MEND Project



The Purpose of the Project

Build capacity with regard to the planning of mass evacuations in natural disasters

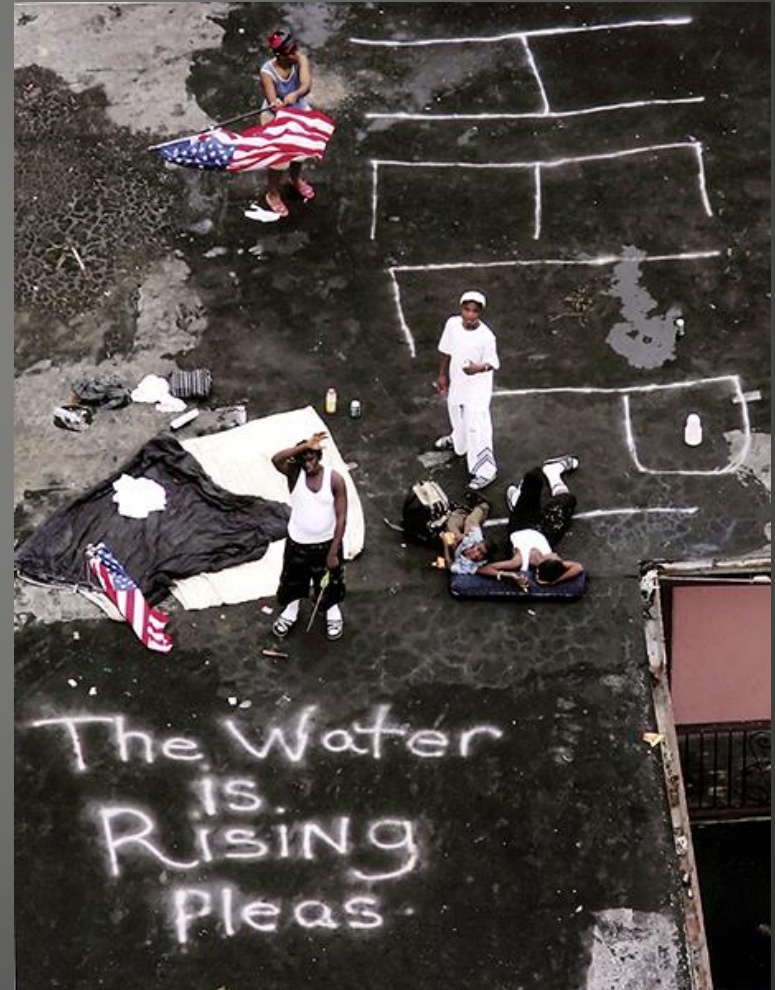
Improve the management of mass evacuations to save more lives and offer greater protection and support for the population

Prevent a disaster becoming a disaster



Hurricane Katrina – Inadequate Planning

- Tens of thousands of people were left in the city without food, adequate shelter or healthcare
- Lack of adequate planning and coordination – in many developed countries of the world



Nepal Earthquake 2015 – Open Spaces

Lessons Learned

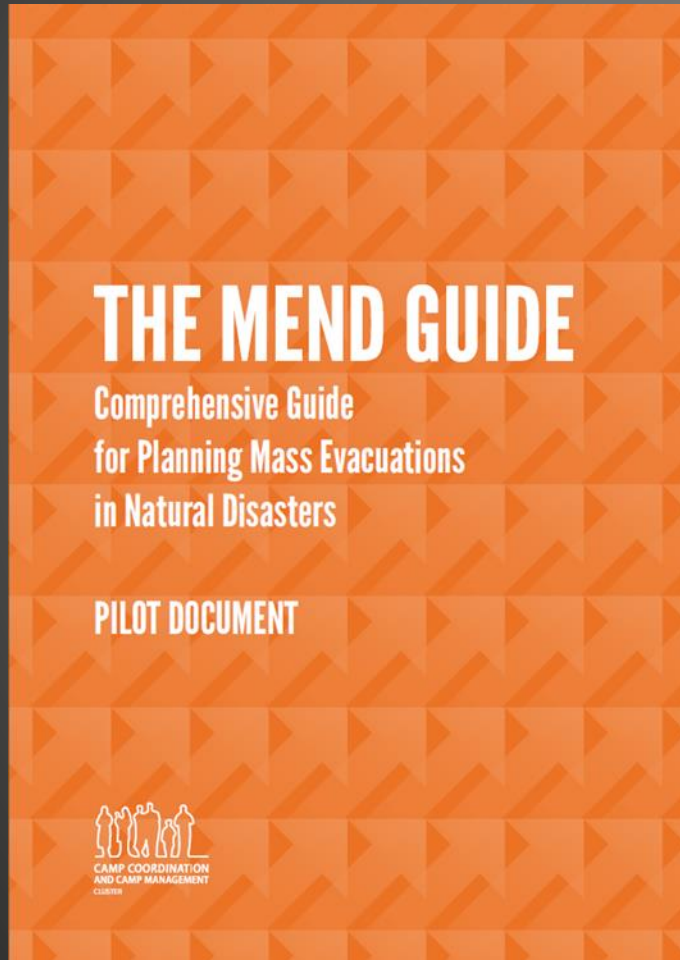
- Open Spaces Project outcome of preparedness work
- These spaces should have offered protection in the immediate aftermath of the earthquake and provide a starting point for humanitarian actors to offer assistance
- Success limited as not sufficiently planned



Project Objectives

- Identify and address gaps and weaknesses in existing evacuation plans
- Provide training and support to develop a new or more comprehensive evacuation plan
- Conduct exercises to familiarize the procedures for carrying out an evacuation
- Highlight the complexity of implementing a mass evacuation, and the need for a comprehensive plan
- Enhance the ability to save lives before a disaster strikes world-wide

The MEND Guide



A template to support the planning and preparedness of mass evacuations, at national or local level

Based on information exchange and best practises from various countries and international organizations

Covers issues from pre-plannning, to implementation and the return of evacuees

Why evacuation planning

- The purpose of evacuations is to save and protect lives of people exposed to danger
- Planning is critical to mobilize resources, manage the response and meet emergency needs
- A responsibility of the disaster affected state to ensure the protection of persons and the provision of disaster relief and assistance on its territory (UN Res 46/182)
- Mass evacuations involve a wide range of various actors, that all need to work towards the same goal
- We believe the better planned an evacuation is; the better the displaced will react and respond

Building preparedness on experience and best practice

- While some countries have extensive experience in preparing and conducting mass evacuations, other countries do not
- The MEND Guide is a result of an exchange of experiences and best practices, so that countries can learn from each other
- It also attempts to bring together emergency management and humanitarian principles
- A MEND Steering Committee composed of several countries and international organizations

Evacuation Guidelines as a tool for planning

- The MEND guide provides a broad-based template that different states can use as a reference in the development or revision of their own evacuation guidelines – national or local level.
- There is no «blueprint» evacuation plan, but it has to be developed on the basis of specific risks, scenarios, institutional setting etc.
- The MEND guides emergency planners thru various pre-planning considerations, that need to be taken into account before and during the development of an evacuation plan
- The MEND Guide assumes that an evacuation is a measure of last resort

Content of the Guide

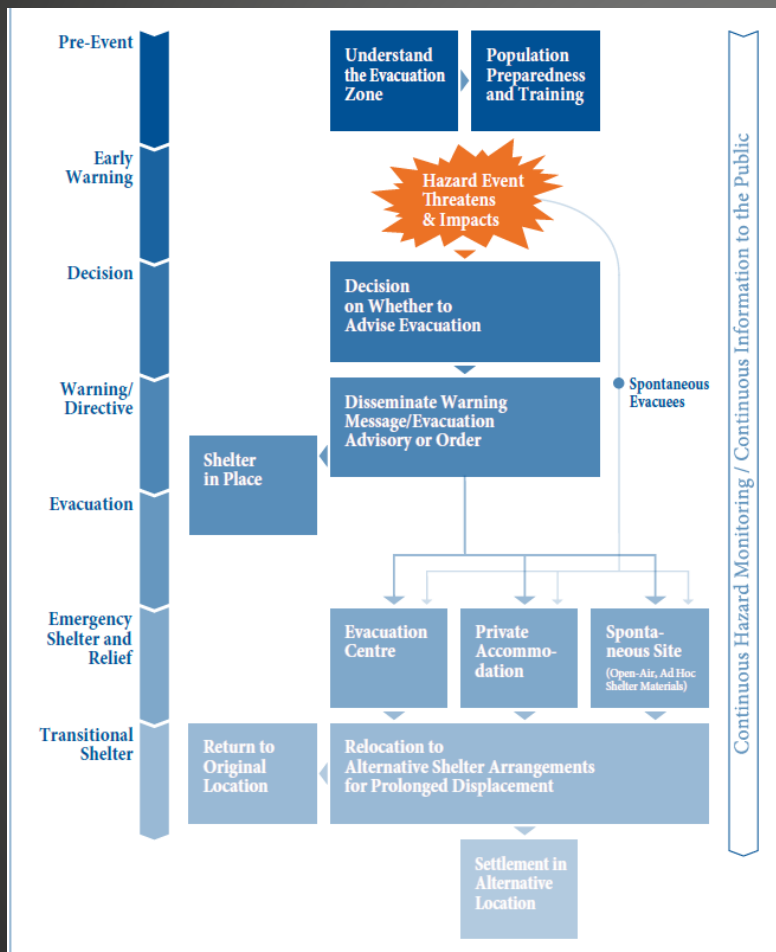
Pre-Planning Considerations

Cross Cutting Issues (legal framework, roles and responsibilities, protection, synergy across authorities)

Understanding the Evacuation Zone (community analysis, risk assessments, security concerns, timing models)



Evacuation Phases



- Pre-event
- Early Warning
- Decision
- Warning/Directive
- Evacuation
- Emergency Shelter and Relief
- Transitional Shelter

Vesuvio emergency plan as example

- 700.000 people may be involved in the evacuation phase
- A high degree of complexity characterizes the global planning
- Strong interaction with the scientific community
- The Italian Civil Protection Department is the entity responsible for making the decision to evacuate the population.
- Complex emergency planning is sustainable in case of strong commitment and fundamental legislation in place

VESUVIO EMERGENCY PLAN

Dangerous zones

RED ZONE. The red zone is the area immediately surrounding the volcano, and is in greater danger as potentially subject to invasion by pyroclastic flows or buildings collapse caused by the ash deposit. The National Emergency Plan foresees that the red area is completely evacuated before the eruption.

25 municipalities of
Napoli and Salerno

UPDATE DIRECTIVE
FEB 2014

YELLOW ZONE. The yellow zone corresponds to the entire area that could be affected by the fallout of pyroclastic particles - ash and lapilli. The fallout of particles may cause buildings collapse and respiratory problems, particularly in susceptible individuals who are not adequately protected, damages to crops and problems to air, rail and road traffic.

63 municipalities
Naples,

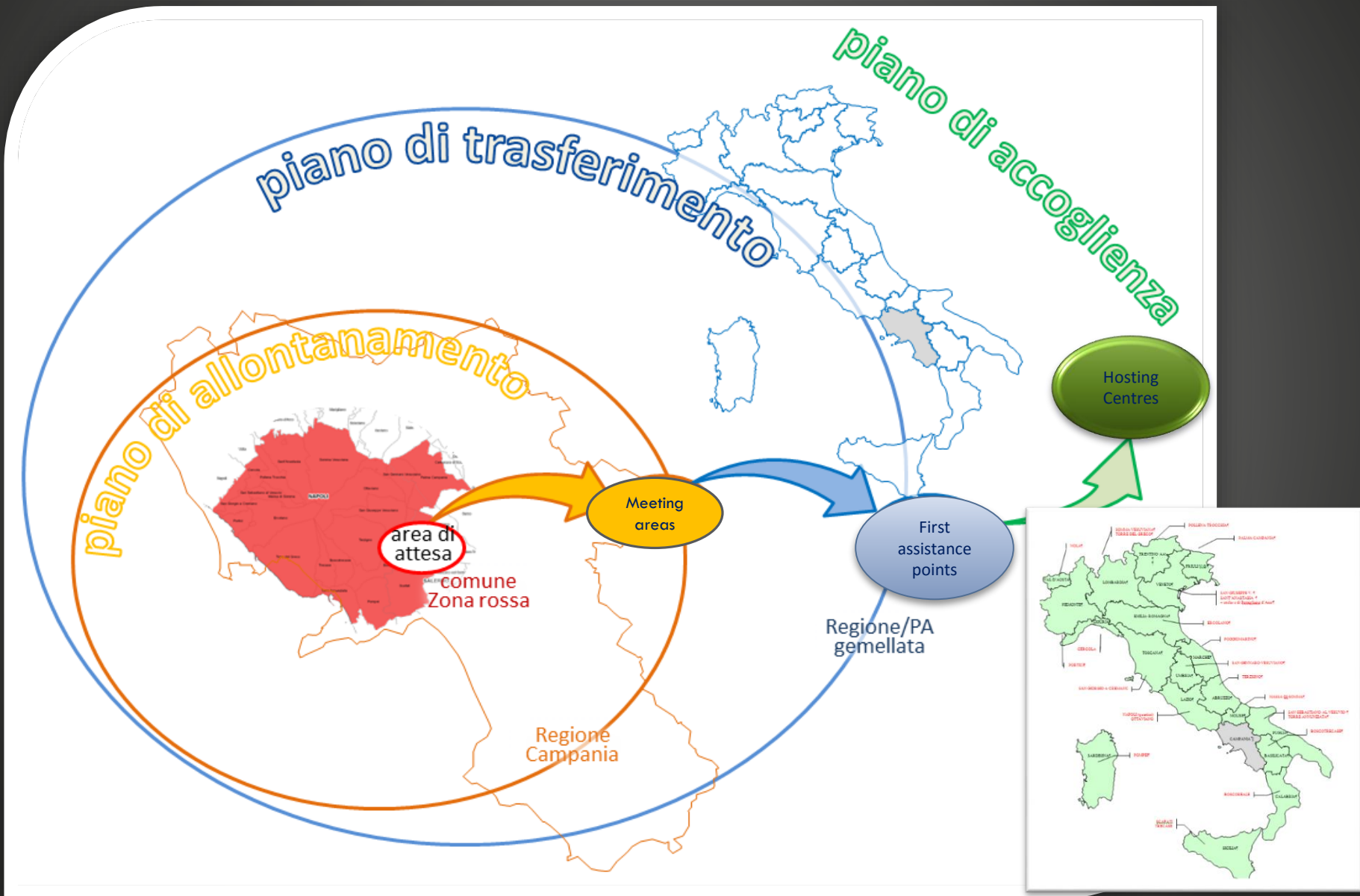
BLUE ZONE. The Blue Zone falls within the yellow zone, but is subject to an agent of **further danger**. Corresponds to the "valley of Acerra - Nola," which, for its hydrogeological characteristics, may be subject to **floods** as well as the **fallout of ash and lapilli**.

To be updated

THE SCIENTIFIC COMMUNITY ROLE

<i>ALERT LEVEL</i>	<i>State of volcano</i>		<i>Operational phase</i>	<i>Activity</i>
BASIC	No variation of monitored parameters			
ATTENTION	variation of monitored parameters		I ATTENTION	<ul style="list-style-type: none"> • Intensify monitoring activities • Information to the population •
PREALARM	Further variation of monitored parameters		II PREALARM	<ul style="list-style-type: none"> • Activation of national emergency centre on site (Di.Coma.C.) • Spontaneous evacuation (CAS) • Health facilities evacuation •
ALARM	Pre-eruption dynamics		III ALARM	<ul style="list-style-type: none"> • EVACUATION: transfer and hosting in twinned Regions
	Eruption		IV Eruption	

Evacuation strategy



Project Rollout

Workshops and Simulations
have so far been conducted
in the Philippines, Nepal,
Ecuador, Bangladesh,
Myanmar.

MEND ToT and MEND preparedness mission (Vanuatu)

Partners include UNDAC,
ECHO, IHP, MSB, DPC, THW
and others



Capacity building workshop in Nepal. 2015

Thank you !

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