

WHAT IF 'IT' HAPPENED NOW?

HOW DO FAMILIES COMMUNICATE AND PREPARE FOR SEISMIC HAZARDS IN THE AZORES?



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PROJECT

Creating emergency plans

Families' preparedness for seismic events
in the Azores

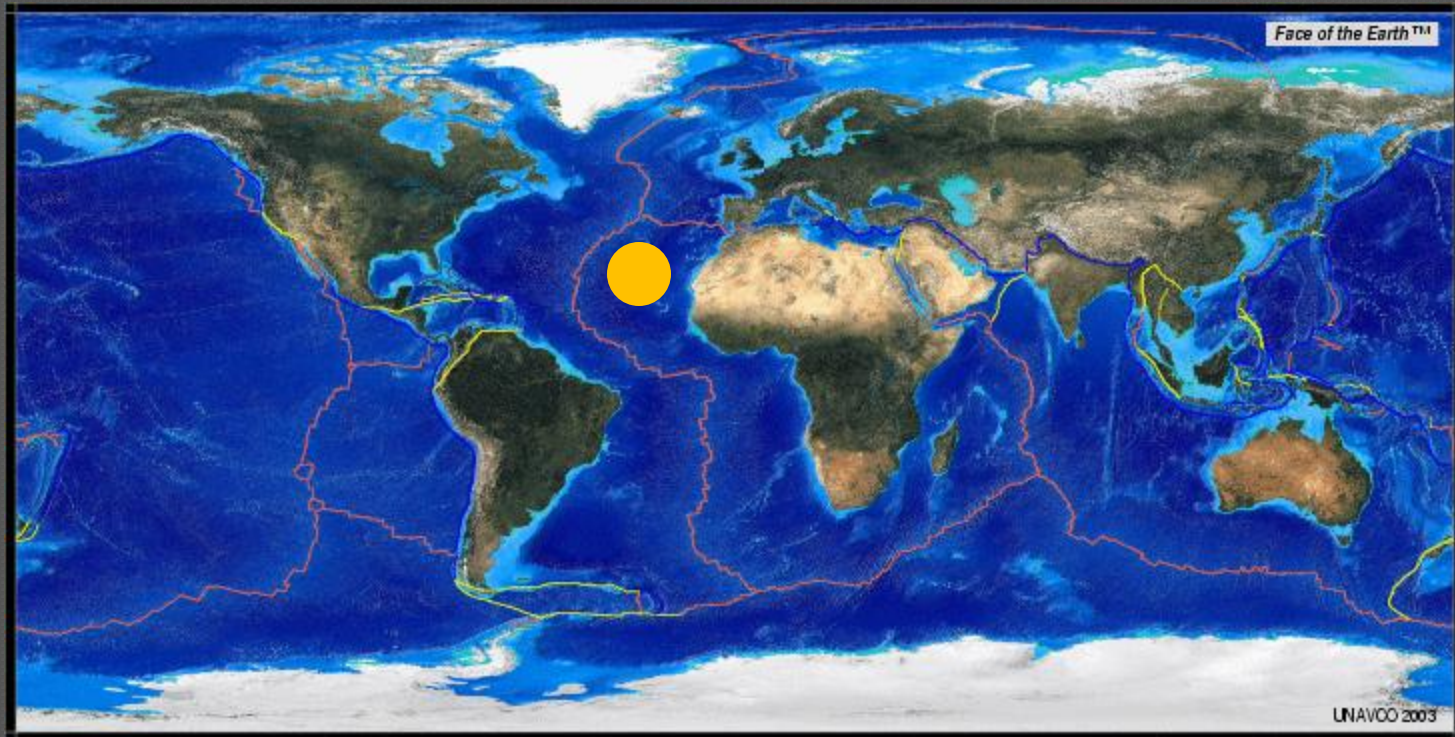


Geographical & Theoretical Background

Major Goal

Main Features

Geodynamics of The Azores



The Azores are nine islands, located over a triple junction of three large tectonic plates: the North American Plate, the Eurasian Plate and the African Plate.

Earthquakes and volcanic eruptions

Events with the most serious impacts throughout history.

≤ 20th cent..



Volcanic Eruptions

Earthquakes

Earthquakes & Volcanic Eruptions

Recent events in the memory of Azoreans



1957-1958 - Capelinhos Eruption,
Faial island



1980- Earthquake - Terceira,
S. Jorge, Graciosa



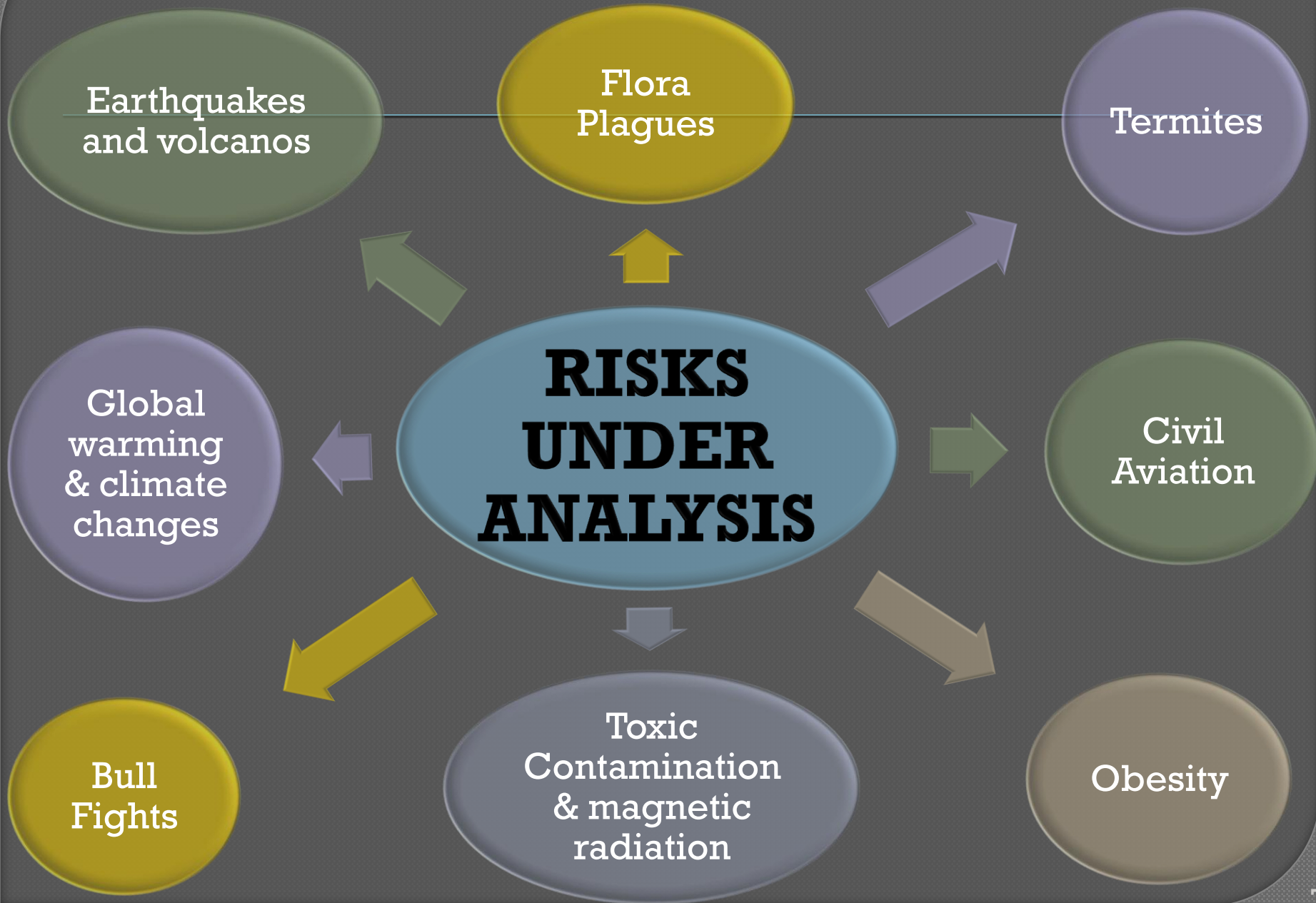
1998- Earthquake - Faial, Pico
e São Jorge

- 1957-1958: A submarine eruption 1Km away from the Faial island
- 1980: 71 deaths, over 400 wounded and 15 000 homeless
- 1998: 8 deaths and over 400 wounded and 1700 homeless

What is the *scenario* of knowledge on seismic risk perception in the Azores?

What do we know about Azoreans preparedness to deal with seismic events?

Research on risk perception at the University of the Azores began in 2006



Results from a previous study ⁽¹⁾ - Risk profile evaluation

(*TOPOI METUS*, 2006-2009)

- ◎ **Uncontrollability**
- ◎ **Earthquakes are the most serious natural hazard in the Azores**

Results from a previous study ⁽³⁾ – Preparedness

(TOPOI METUS, 2006-2009)

- ◎ What is done by authorities/entities (e.g. Government, Civil Protection, experts, schools)?

During and after a crisis: Ok; The Government does its share; things work because **people help each other**

Before a crisis, to prepare citizens: **Nothing**

- ◎ What is done by the person him/herself?

A sense of not needing more information to be better prepared, to become more resilient to crisis and crisis impacts

There is not a ‘culture of precaution’

There are pamphlets and a chapter in a manual available on the internet about preparing to and dealing with earthquakes.

SE ESTÁ A CONDUZIR
 Pare a viatura longe de edifícios, muros, taludes, postes e cabos de alta tensão e permaneça dentro dela.

DEPOIS
 Mantenha a calma e corte com a ocorrência de possíveis réplicas.
 Não se precipite para as escadas ou saídas. Nunca utilize elevadores.
 Não fume, nem acenda fósforos ou isqueiros. Podem haver fugas de gás.
 Corte a água e o gás e desligue a electricidade.
 Utilize lanternas a pilhas.

Ligue o rádio e cumpre as recomendações que forem difundidas.
 Limpe urgentemente os produtos inflamáveis que tenham sido derramados (ex: álcool ou tintas).
 Evite passar por locais onde existam fios eléctricos soltos.
 Não utilize o telefone, excepto em caso de extrema urgência (feridos graves, fuga de gás ou incêndios).
 Não circule pelas ruas para observar o que aconteceu. Liberte-as para as viaturas de socorro.

SISMOS...
 Saiba o que Fazer

Antes, Durante e Depois!

A PROTECÇÃO CIVIL COMEÇA EM SI...

ORGANIZE O SEU KIT DE EMERGÊNCIA:
 Reuna uma lanterna, um rádio portátil e pilhas de reserva para ambos, bem como um extintor e um estojo de primeiros socorros.

CONHEÇA OS LOCAIS MAIS PERIGOSOS.
 Junto a janelas, espelhos, candeeiros, móveis e outros objectos. Elevadores e saídas para a rua.

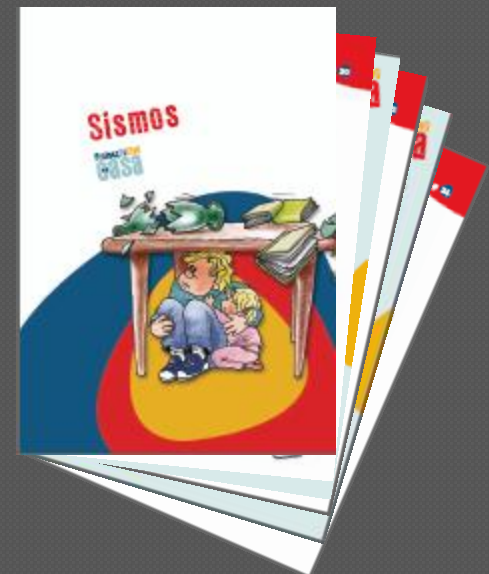
DURANTE
DENTRO DE CASA

Abrija-se no vão de uma porta interior, nos cantos das salas ou debaixo de uma mesa ou cama.

Mantenha-se afastado de janelas e espelhos. Tenha cuidado com a queda de candeeiros, móveis ou outros objectos.

SE ESTÁ NA RUA
 Dirija-se para um local aberto com calma e serenidade, longe do mar ou cursos de água.
 Não corra nem ande a vaguear pelas ruas.
 Mantenha-se afastado dos edifícios (sobretudo dos mais degradados, altos ou isolados) dos postes de electricidade e outros objectos que lhe possam cair em cima.
 Afaste-se de taludes, muros, chaminés e varandas que possam desabar.

Fixe as estantes, os vasos e floreiras às paredes do seu caso.
 Coloque os objectos pesados, ou de grande volume, no chão ou nas estantes mais baixas.
 Ensine todos os familiares como desligar a electricidade e cortar a água e o gás.
 Tenha à mão, em local acessível, os números de telefone de serviços de emergência.



high-school students motivation for preparedness

(Shawn, 2003)

- students learn about earthquakes in school and seem to be aware of its risks.
- However, only 25% performs risk reduction actions.

Project: Creating emergency plans - Families' preparedness for seismic events in the Azores

Underlying ideas:

- ⦿ Difficult to openly communicate about frightening issues, even when they represent serious risk for individuals and communities.
- ⦿ Such difficulty may persist, or increase, in situations where children are involved.
- ⦿ Incapacity to talk about potential harmful events may, affect the way people anticipate and prepare for those situations

Project: Creating emergency plans - Families' preparedness
for seismic events in the Azores

Major Goal

**Observe and understand the ways
in which families create a familiar
emergency plan to face an earthquake**

Project's Phases

- Selection of families
- First Interview
- Family Emergency Plan Development
- Second Interview
- Publicizing the Emergency Plans

Criteria to select the families

- ⦿ **Autonomy of dependent individuals in the family**
- ⦿ **Perceived seismic vulnerability of the building**

First Interview

- ⦿ **Semi-structured**
- ⦿ **Based on a previously used script**
- ⦿ **Focusing on dimensions under observation –
knowledge, beliefs, affect, trust, actions/routines**

Dimensions

- ◎ Risk characterization

ex: *What causes earthquakes in the Azores?*

- ◎ Risk profile evaluation

ex: *Have all the islands been equally affected by those natural events?*

- ◎ **Systems' vulnerability evaluation**

ex: *Who has been more affected by earthquakes? Has anyone benefited with those events?*

- ◎ **Risk management** (before, during, and after the crisis)

ex: *What should people do to prepare themselves for earthquakes?*

- ◎ **Trust** – in information processes; in risk management processes

ex: *How much do you trust the entities involved in crisis management? How much do you trust in the crisis information that is given to citizens?*

- ◎ **Place attachment** – connectedness with the place

ex: *How connect are you with this place? How much do you enjoy living here? Would you live in another place? Knowing the dangers of living in the Azores, why do persist in living here?*

Family Emergency Plan Development

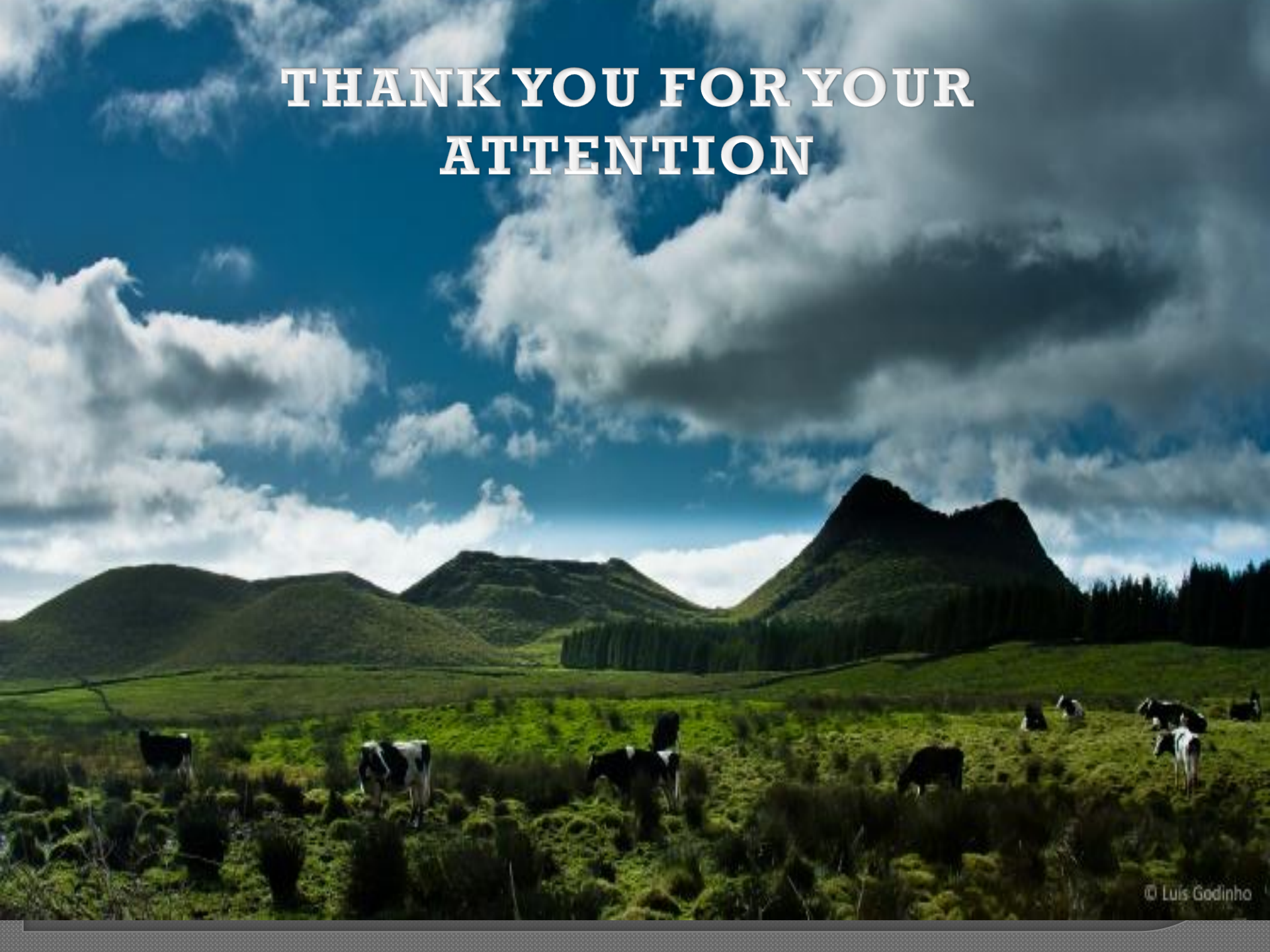
Second Interview

- semi-structured
- The Emergency Plan
- How the Plan was develop:
 - what was done, how, and why
 - who headed the process, who was involved what kid of communication

Publicizing the Emergency Plans

- Following the suggestions of the families

**THANK YOU FOR YOUR
ATTENTION**



References

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