Resiliency of Businesses During 2010 Maule Earthquake: An Investigation of the 2017 LFE Study Program

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Introduction

- **Goal**: To assess the resilience of communities affected during the 2010 Maule earthquake by evaluating the state of business nearly seven years after the event.
Outline

1. Introduction
2. Study Cases
   - Study Case 1
   - Study Case 2
3. Conclusions
4. Learnings from the LFE Program 2017
5. Acknowledgements
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Study Cases

- Summarize the effects of the 2010 Maule earthquake on business continuity at a local level.

- Two study cases:
  - Study Case 1: Colchagua Valley Winery.
  - Study Case 2: Chelita market in Santa Cruz.
Study Case 1: Colchagua Valley Winery
Study Case 1: Colchagua Valley Winery

Zareian et al. (2012)
Study Case 1: Colchagua Valley Winery

Damages in other wineries in Chile, Zareian et al. (2012)
Study Case 1: Colchagua Valley Winery
Study Case 1: Colchagua Valley Winery
Study Case 2: Chelita market in Santa Cruz
Conclusions

- The findings presented should not be taken as indicative of any larger set of businesses.

- With the event eight years in the past, specific indicators used to evaluate economic performance were not readily recalled.

- The challenge of having owners that were not working during the event can be overcome by maintaining communication through successive reconnaissance trips and/or interviews.
Conclusions

• Having a preparedness plan implemented could greatly reduce the risk of interrupting a businesses’ economic activity after a strong earthquake.

• The winery did not experience any damage after the earthquake although many other wineries nearby and throughout Chile experienced loss of product and machinery.

• Resiliency of the local market in Santa Cruz allowed the owners to help people and was critical to the recovery of the community in Santa Cruz. In turn, the market increased its customers and revenue.
Learnings from the LFE Program 2017

- Gathered of multiple perspectives on the effects of damage in the daily life of communities affected by the 2010 Maule earthquake.

- Analyzed the effects of the earthquake from the perspective of employment in multiple regions and business enterprises.

- Experienced group dynamics and challenges faced by reconnaissance teams.
Learnings from the LFE Program 2017

- Learned the LFE EQ Data Collection and archive procedure.

- Proposed to Paolo Zimmaro from UCLA to include LFE liquefaction data in the Next Generation Liquefaction Database when liquefaction occurs after an earthquake.

- As an entrepreneur I am more aware of the risks to small businesses due to lack of an earthquake preparation plan.
Acknowledgements

This project has been supported by:

[Images of people and logos]
References


9. C. Gonzales-Muzzio and V. Sandoval Henriquez, "Resilient Responses from Communities and Companies after the 2010 Maule Earthquake in Chile". The “State of DRR at the Local Level” A 2015 Report on Patterns of Disaster Risk Reduction Actions at Local Level, 2015.
Thank you for your kind attention

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