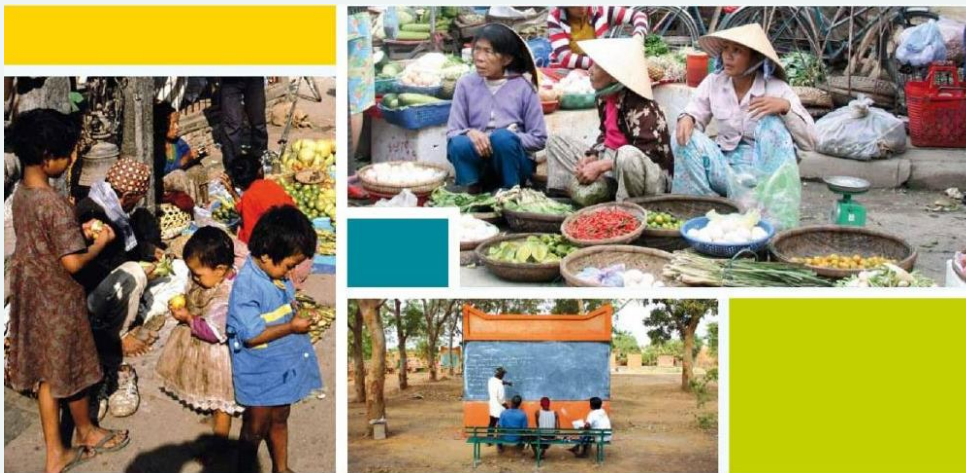


# nopoor final conference

6-7 June 2017, Brussels

## Social Policy Responses of the Chilean State to the Earthquake and Tsunami of 2010



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This presentation is based on a new special issue published on the Chilean 2010 earthquake by *Latin American Perspectives*

Forthcoming in June/July 2017

Edited by Kirsten Sehnbruch



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# 27F: the 2010 Earthquake in Chile

- 8.8 earthquake and tsunami hit south of Chile (Concepcion) causing 575 fatalities
- Economic losses of 30bnUSD, 18% of Chilean GDP
- Only 2.5% of public infrastructure was lost, but 370,000 homes were destroyed or severely damaged and telecommunications broke down
- Office for national emergencies (ONEMI) underequipped, under-resourced and understaffed
- Reconstruction process evaluated mostly negatively by local populations, especially from a mid- to long-term perspective



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# Context: Chile

- Chilean context: high occurrence of disasters together with lack of institutional capacity given the country's level of development
- Diverse institutional capacity between central government and regional/local governments
- Policy execution relies on personal networks, and is not exempt from clientelist practices
- Social policy system generally based on targeting not universal benefits
- Change of government 14 days after earthquake
- Significant participation of NGO sector
- No institutions for reconstruction, only emergencies



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# The political cycle of disasters

## Three stages of disaster response

1. Immediate crisis: focus on infrastructure damage and victims
2. Reconstruction
  - Concern with disaster response and institutions immediately following event
  - Then back to politics as usual
  - This government made an unusual effort to avoid this
3. Long-term development strategy for economic recovery



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# Research Methodology

- Diff in diff analysis of earthquake's effects based on pre- and post-earthquake household surveys
  - Survey shows significant but diverse impact across regions on housing, health, education, poverty and employment
  - Results too general for specific analysis of individual communities
- Qualitative analysis of reconstruction process:
  - Analysis of official documents, press and other sources of information
  - Focus groups and interviews with community leaders (all women) in one of the most affected cities (Constitucion)



# Conclusions from qualitative research

- The research presented in this special issue shows how precarious administrative institutional development still is in Chile, particularly in a post-disaster presentation
- The same goes for Chile's social policy infrastructure (FPS)
- Reconstruction efforts lack long term planning, social involvement and dialogue
- The combination of targeting + (weak) decentralisation + privatisation + limited capacities of the State is devastating in post-disaster context



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# General Conclusions

- There must be a functioning risk management structure, but ONEMI does not have capacity to deal with all stages of a disaster → dispersion of political responsibilities
- The pre-existing system or structure of social protection is key to disaster response, eg. principal of universality vs targeting
- Without institutions designed for the purpose, disaster response is ad hoc and subject to politics of the moment
- Existing institutions must adapt to circumstances rather than the other way around



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# Policy recommendations

1. Strengthen institutions at the regional and local level (partially underway)
2. Establish institutions for reconstruction as well as for disaster prevention and response
3. Involve local populations in reconstruction process through institutions designed to facilitate social dialogue
4. Establish universal rather than targeted benefits for post-disaster victims based on geo-referenced imaging
  - Use improved technology for identifying those areas and squares (manzanas) most affected by a disaster



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SUMMARY OF VULNERABILITY  
Social; Built; Natural; Technical

- Vulnerable\_Socio\_Eco
- Vulnerable\_Housing
- Blocks\_Lanslide\_Medium\_High\_Liquefact
- Blocks\_Concepcion\_SymDiff\_All

## Spatial modelling based on of socioeconomic characteristics at the “block” level (30m).

1. Requires initial data collection of socioeconomic and geophysical characteristics to establish a baseline
2. Model damaged caused by disasters after the event through satellite or drone photography
3. Damage assessment through computers
4. Analisis of needs and beneficiaries

**Centro de  
Inteligencia  
Territorial (CIT), UAI**

Source: Maria Ignacia Arrasate, Cristóbal Fuentes, and Flavio Sciaraffia work at Research Seminar in Territorial Intelligence at Harvard Graduate School of Design with Luis Valenzuela, Fall 2014.

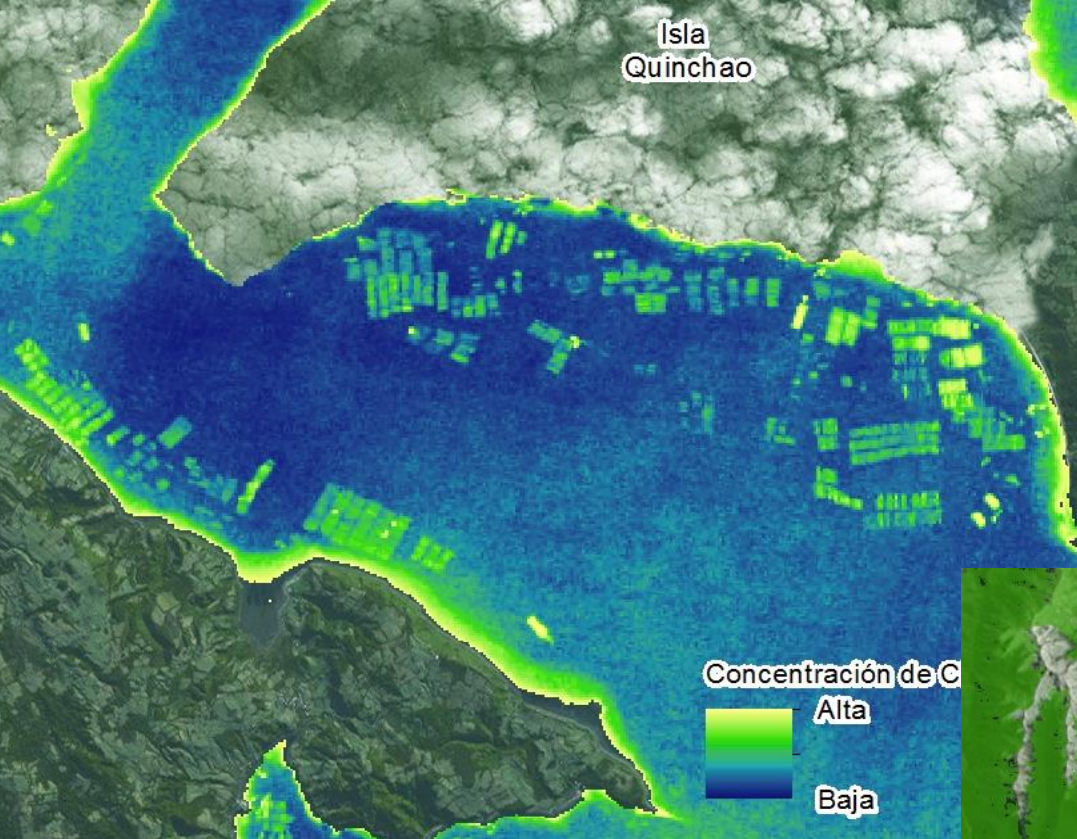


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# Modelling of water levels and aquaculture in southern Chile



FUENTE: Arriba: Detección de jaulas de acuicultura. Golfo de Ancud, 2015 Abajo: Superficie de bosque nativo y superficie de laguna P.N. Laguna de la Laja. 2015.

