



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

by

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Decades of neoliberal policy have left Chile with a skeletal state that administers social policy through targeting and outsourcing in public-private partnerships that lack coordination. The reconstruction after the 2010 earthquake and tsunami responded to the emergency largely according to these same principles. While official reports on the reconstruction effort show a state that is complying with its goals, evidence from fieldwork in the city of Constitución illustrates that this method is highly inadequate in the context of a natural disaster. Chile should establish a social policy structure for natural disasters that allows for a rapid response to a social emergency based on universal or near-universal allocation criteria.

Varias décadas de políticas neoliberales han dejado a Chile con un estado débil que simplemente administra las políticas sociales por medio de la focalización y las subcontrataciones en alianzas público-privadas que carecen de coordinación. La reconstrucción después del terremoto y el tsunami de 2010 respondió a la catástrofe mayormente de acuerdo a estos mismos principios. Mientras los informes oficiales sobre los esfuerzos de reconstrucción muestran a un estado que cumple con sus metas, el trabajo de campo en la ciudad de Constitución demuestra que este método es decididamente insuficiente en el contexto de un desastre natural. Chile debe establecer unas estructuras de política pública para lidiar con los desastres naturales que permitan dar una respuesta rápida a las emergencias sociales en base a criterios de asignación universales o casi universales.

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Most accounts of the Chilean earthquake and tsunami of 2010 begin with an enumeration of the losses that it caused: the number of lives lost, the percentage of housing lost, and the economic cost (CEPAL, 2010; Gobierno de Chile, 2011; 2012; Larrañaga and Herrera, 2010). Analysts argue that Chile's material infrastructure withstood the earthquake so well because decades of work on building codes and their enforcement had produced earthquake-safe structures

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(Bitar, 2010; Cámara Chilena de la Construcción, 2010). In addition, experts highlight the rapid response of the government in reestablishing telecommunications services and road connectivity. By comparison, the social consequences of the earthquake and the institutional response to them have been very little studied.

Chile has experienced numerous socio-natural disasters. On many occasions, the processes of reconstruction that followed have provided a significant impetus for local development and for the establishment of social policies (Lawner, 2011). In fact, on previous occasions, the Chilean state has improved its institutions and policies as a result (see Arana in this issue). As Pelham, Clay, and Braunholz (2011) argue, natural disasters must be considered as part of the development process and not as exogenous events. It is extremely important to ask about the institutional response in light of the fact that decades of neoliberal policy have left Chile with a skeletal state that administers social policy largely through targeted and very narrowly focused social programs (Atria et al., 2013; Borzutzky, 2002; Özler, 2012; Solimano, 2012). As a result, the state addressed the social impact of the 2010 earthquake by applying regular social programs and policies.

There is consensus that social policy in Chile is based on three central elements: selectivity and targeting of spending, the privatization of service provision, and the decentralization of the execution of social policy (Taylor, 2003). The selectivity and targeting are based on the selection of beneficiaries according to poverty criteria. Until 2006 the national poverty line, which in that year was 13.8 percent of the population, was used. After 2006 the targeted population was gradually increased to 20 percent, 40 percent, or 60 percent depending on the policy.¹ Thus the state has become a distributor of subsidies in different areas of social policy (health, education, employment, or housing, for example). Since natural disasters affect both the poor and the nonpoor, the targeting criteria exclude a significant proportion of the population from potentially receiving benefits. (The housing of low-income households did, however, suffer greater damage because of the precarious quality of the houses and their location in high-risk areas [Larrañaga and Herrera, 2010]. Among the poorest quintile 12 percent of the housing was severely damaged as opposed to the 8.8 percent average for the affected regions.) The fact that the same allocation criteria are also used for other benefits (such as income or child support) may compound the exclusion of nonpoor households from social policy. Furthermore, natural disasters also produce new vulnerabilities (Arteaga and Tapia, 2015) that the standard allocation mechanisms do not take into account.

This paper presents the hypothesis that “actually existing neoliberalism” (Brenner and Theodore, 2002) in Chile has generated a social policy system based on minimal targeted benefits that relies for its execution on nongovernmental organizations (NGOs) operating in a decentralized and uncoordinated way and therefore limits the role of the state in a postdisaster emergency situation. Any change in this social policy model would require establishing a new balance between the state and private actors, an option that the Chilean government has always been unlikely to countenance, especially in an emergency. The application of this model to the 2010 earthquake and tsunami meant a deficient diagnosis regarding the social impact of the catastrophe. Furthermore, the institutions themselves proved unable to address the new vulnerabilities

that were consequences of the disaster. In fact, response mechanisms that cannot deal with the social emergencies of earthquakes and other natural disasters can be just as devastating as the material damage caused by the disaster (Hoffman and Oliver-Smith, 2002).

This paper is based on a review of the academic and institutional literature on natural disasters and on the role of the Chilean state in the context of its social policy response. We relate this literature to the Chilean case and to the empirical evidence from a 2010 household survey specifically designed to capture the impact of the earthquake and tsunami and from fieldwork in 2013 in a coastal city that was significantly affected by both. Our interviews of civil servants involved in the distribution of social benefits to families affected by the earthquake and of local residents who had to deal with the procedures through which benefits were allocated allowed us to gauge the ability of the government to respond to the social emergency created by the disaster.²

Our conclusions indicate that the foundations on which Chile's sociopolitical model rests are fragile in a postdisaster context. The way in which targeting, outsourcing, and uncoordinated actions are carried out produces tensions and new inequalities in the affected territories. We therefore agree with the international literature in recommending mechanisms with universal or near-universal allocation criteria and enduring coordination in the circumstances of natural disasters. We emphasize that our analysis is limited to the social policy response to the emergency of the state. Although the private sector (both corporations and NGOs) played a significant role in the execution of the reconstruction process, it was not connected to the social policy infrastructure that managed the postdisaster situation (see Arana and Imilan and González in this issue).

THE ROLE OF THE STATE IN DEALING WITH NATURAL DISASTERS

Most countries, whether developed or less developed, are ill prepared for dealing with the traumatic and destructive consequences of disasters. Governments generally do not prioritize policies that prepare for potential natural disasters and tend to respond only when circumstances force them into action. After a catastrophe, public and political attention focuses on the mitigation of damages and on supporting the victims, who acquire a protagonistic role in the media. This interest gradually declines in the period following the disaster, and governments return to "politics as usual" until the next disaster happens (Birkland, 1996). Planning for potential disasters is therefore often relegated to the back burner. This vicious circle is compounded by the fact that governments get little political credit for preventing a disaster but once a disaster occurs political credit depends on how well they respond to it (Pelham, Clay, and Braunholz, 2011; UN, 2002).

According to Vakis (2006), the institutional systems used to deal with disasters vary significantly with the socioeconomic and cultural context. However, some common principles must be included, among them a preexisting permanent institution for risk management. In Chile the relevant institution is the

Oficina Nacional de Emergencias (National Agency for Emergencies—ONEMI),³ but it does not have infrastructure for the management of all phases of the disaster cycle. It has very limited resources, limited capacity to coordinate risk prevention programs (see Vargas, 2002), and no institutional mandate to manage a reconstruction process. Its capacities are concentrated on organizing the emergency response to natural disasters, and in this case its response was extremely ad hoc. This is particularly important because low-income households have limited means for dealing with the consequences of a disaster. In general, they are inclined to reduce the consumption of food, health, and education after a catastrophe, which only ends up worsening their vulnerability.

Vakis (2006) argues that a preexisting system of social protection must be considered an integral part of any risk management strategy. Complementary to and synchronized with other emergency response mechanisms, such a system can be adapted to the occurrence of unexpected natural disasters and coordinate the efforts of the public and the private sector. It must be based on a system of information that allows policy makers to identify the risks to which a particular population is subjected and to develop a strategy for managing emergencies. Along these lines, Pelham, Clay, and Braunholz (2011) suggest social safety nets integrated with a more general social protection system that consists of unconditional transfers of goods or money and is activated in the case of a natural disaster to protect in particular the most vulnerable households.

In Chile, there are no protocols for dealing with postdisaster situations, and therefore the institutional response in each particular situation is designed by the administration in office. The only risk management institution that exists is the ONEMI, but it has limited capacity for dealing with large-scale disasters. As a consequence, with the exception of some minimal microcredit programs for fishermen,⁴ many rural communities located far from urban centers managed the emergency on their own (Imilan, Fuster, and Vergara, 2015).

The principal mechanism for allocating reconstruction aid was the *ficha de proteccion social* (the social protection form—FPS), which is based on principles of targeted rather than universal benefits and generally does not contemplate the option of cash transfers. The FPS is a central tool in the process of targeting spending on which the Chilean social protection system is based (Taylor, 2003). Its origins are related to the neoliberal military regime's efforts to reduce the role of the state. The privatization of social security provisions eliminated any aspiration such as those of previous governments to establish universal social rights (Borzutzky, 2002; Illanes and Riesco, 2007; Solimano, 2012). The replacement of social security systems that shared risk among their beneficiaries with privatized systems and minimal state guarantees was accompanied by the concept of rigorous targeting: individuals not covered by the new privatized social policies would receive minimum benefits from the state.⁵ To determine whether an individual was eligible for a potential benefit, a local government official would visit the household to undertake a survey of its general situation (e.g., the materials and quality of housing, whether the household possessed a television, refrigerator, or telephone, who was employed, and the income level of the family) that would translate the household's level of need into a point score.

Benefits would be assigned on the basis of this score. In 2007 this method was replaced by the FPS, which measures the household's capacity to generate income (the number and age of family members, their educational levels, and their employment situations) (Herrera, Larrañaga, and Telias, 2010).

Whatever the criticism of this mechanism for targeting social policies, it most certainly is not an appropriate tool for allocating benefits in the wake of a natural disaster, as it is insensitive to new conditions of vulnerability caused by the natural disaster. This problem became so evident in the postearthquake context that the affected population immediately demanded its abandonment (see Pulgar, 2014). However, in the absence of a social policy infrastructure specifically designed for dealing with the consequences of natural disasters, the government had to use established policy instruments for dealing with the reconstruction process rather than experiment with new and untested policies. Bureaucrats in state agencies therefore never questioned the decision to apply policy tools designed for the allocation of social benefits under normal circumstances to a disaster situation.⁶ In fact, the only self-criticism that policy makers put forward during interviews and at public events with regard to the reconstruction process was that they had generated unrealistically high expectations among the population affected by the disaster by promising rapid and efficient solutions to housing problems that they were then unable to deliver.⁷

THE IMPACT OF THE EARTHQUAKE ON WELL-BEING

Understanding both the long-term and the short-term impact of the 2010 earthquake and tsunami on the affected regions in Chile has not been an easy task. In the period immediately following the disaster, affected communities had a difficult time establishing precise statistics on the extent to which their material infrastructure (including private housing) had been damaged. Even more difficult was ascertaining the impact of the disaster on the labor market, on the population's health, and on education. As a result, different government agencies produced widely differing statistics on the damage caused by the earthquake, in some cases vastly inflated by the pressures exerted by local communities (which, together with regional governments, were responsible for applying the FPS) to declare the most damage possible with the objective of obtaining the largest possible share of reconstruction resources. In fact, both the data on the disaster's original damage and the subsequent data on the reconstruction process were so confusing that the center-left Bachelet administration, which assumed office from the center-right Piñera administration in March 2014, had to commission a special delegate to report on the state of the reconstruction efforts and generate a new road map for the reconstruction process. The report concluded that "the official data available lack updating and correct referencing; the data are inconsistent and incomplete, and measurement standards differ within the same sector; multiple instruments exist that register damage but do not converse with each other, which results in differences between communal, regional, and national data that exceed any fluctuations that could be explained through statistical error" (Forttes, 2014: 9).

Given these statistical problems, we have used data from the Encuesta Post Terremoto (Postearthquake Survey—EPT) that the Ministry of Social Development undertook in the regions of Valparaíso, Metropolitana, Libertador Bernardo O’Higgins, Maule, Bío Bío, and Araucanía to understand the extent of the social emergency that the earthquake and tsunami generated. The EPT gathered data during May and June of 2010 from 22,456 households, a subset of the sample surveyed by Chile’s regular household survey, the Encuesta de Caracterización Socioeconómica Nacional (National Socioeconomic Characterization Survey) of 2009. This makes the EPT a longitudinal survey with two applications, one in 2009 and another in 2010. The survey is representative both nationally and regionally, and it allows us to analyze how the well-being of the population was affected by the earthquake and tsunami. Although well-being is a very broad concept, the survey includes many variables, including those pertaining to multidimensional poverty.

According to the information gathered by the EPT, one of the most dramatic consequences of the earthquake was the damage to and destruction of housing. Approximately 8.8 percent of the residents of the affected areas experienced either major damage to or the complete destruction of their houses. In the three regions most affected by the earthquake, Libertador Bernardo O’Higgins, Maule, and Bío Bío, the percentage affected was 17.3 percent. Predictably, the impact of the earthquake on the housing of low-income households was the highest. On average, 12 percent of the households in the lowest income quintile lost their homes compared with 4.6 percent in the highest income quintile.

Another area in which the survey showed a significant impact was mental health. The survey incorporated the Davidson Trauma Scale, which measures the symptoms and the severity of posttraumatic stress disorder. Even three months after the 2010 earthquake, 12 percent of the population in the affected regions suffered symptoms associated with posttraumatic stress. This percentage was, again, much higher in the three regions most affected, where it varied between one-fifth and one-fourth of the population. Posttraumatic stress was also more prevalent among people from lower-income households, either because they were more affected by the earthquake in terms of its material impact or because they were less likely to be treated for the symptoms. The survey also asked about people’s health status in general, but the questions were so vaguely phrased that government reports ignored this dimension.⁸

The EPT also measured the effect of the earthquake and tsunami on the education of children in the affected regions. A delay in the beginning of the school year affected 24.6 percent of schoolchildren and 70 percent in the three regions that were most affected. Schools in these regions were relatively equally affected by the earthquake whether they catered to high- or low- income households.

Between 2009 and 2010, 10.5 percent of households fell below the poverty line and 7.4 percent rose above it, generating a net increase in poverty at the national level from 16.4 percent to 19.4 percent.⁹ Poverty was measured by means of an absolute measure, a monetary amount associated with a food basket, that dated to the late 1980s. Monetary income below the equivalent of one food basket per person in the household was considered to constitute extreme poverty and income below two food baskets per person absolute poverty.

The number of employed workers nationwide fell by 1.7 percent during this period, but individual regional experiences were very different: The regions of Libertador Bernardo O'Higgins and Bío Bío presented the most significant declines in employment, with negative figures of 10.2 percent and 5.7 percent, respectively. The Maule Region had a smaller decline, only 1.5 percent, and the Araucanía Region exhibited a remarkable job growth of 8.2 percent. However, within regions individual communities were affected very differently. For example, in the Maule Region, Constitución was one of the towns most affected, together with Cauquenes and Pelluhue (ILO, 2010). Overall, the region lost 28,090 jobs, of which 87 percent were those of small businesspeople or self-employed workers. At the same time, earnings did not show great changes in the three most affected regions, mainly because of income growth among lower-skilled workers and a decline among more skilled workers.

From this brief overview we can see that the earthquake and tsunami had a significant impact on many dimensions of the well-being of the population in the affected regions. First and foremost was the material damage suffered in terms of housing and infrastructure (including hospitals and educational establishments). The government's social policies responded primarily to these issues. The significant effects of posttraumatic stress were not addressed by public policies. With regard to the loss of physical capital, there were, for example, some minor programs, but the government mainly relied on the reconstruction effort itself to deal with the effects generated by the earthquake.

SOCIAL POLICY RESPONSES TO THE EARTHQUAKE

The response of the Chilean state to the earthquake and tsunami can be divided into two phases: the immediate response (the emergency reaction phase), which consisted principally of the distribution of emergency aid (water, food, and fuel) and the establishment of emergency shelters, and the reconstruction, which in the sphere of social policy dealt mainly with the allocation of subsidies for the rebuilding of housing.¹⁰ To analyze the institutional response to the earthquake, we undertook fieldwork in the city of Constitución in the Maule Region, a city with 37,000 inhabitants of whom 8,236 were directly affected by the earthquake and tsunami (MINVU, 2010).

Despite the fact that people in Chile are generally quite well-informed about basic emergency protocols, the scale of the 2010 earthquake and tsunami was nevertheless unexpected, and the country proved ill prepared to respond to its immediate consequences. Because of the interruption of communications during the hours following the disaster, the initial public response to the earthquake was both ad hoc and chaotic (Imilan, Fuster, and Vergara, 2015). Municipal and local officials of Constitución state that they were not equipped to provide help in any systematic way and had to respond to the crisis spontaneously, prioritizing the most urgent needs of the moment, with the result that during the first days people had to survive with their own and their communities' limited resources. One resident of Constitución's Cerro O'Higgins, a low-income neighborhood that had suffered extensive damage (interview, Constitución, 2013), said,

The earthquake was on February 27. The mayor and one person from the municipality showed up on the 30th, although they knew from the beginning what had happened to us because the next day they listed the people who had died. Nobody came from the municipality to ask us what we needed, how we were doing, nothing. They arrived on the 30th.

It was in this context that neighborhoods and communities spontaneously organized themselves collectively and held meetings to attend to the most urgent needs of the community, such as finding accommodation for people who had lost their houses, obtaining food, water, and basic supplies, enforcing security in the neighborhood, and organizing meetings with the local authorities in the hope of accelerating the assignment of subsidies (see Simón and Valenzuela in this issue):

At first it was every day. Every day we met in the morning. In fact, this is how I got to be a community leader . . . where I felt more engaged and began to talk about what could be done to fix things, what we were going to do, where . . . placing homeless people with the less affected neighbors, thinking about how to help children to cope with this situation.

The EPT shows that 21.9 percent of heads of households in the Maule Region and 36.9 percent in the Bío Bío Region implemented collective strategies to deal with the problems generated by the earthquake and tsunami. This social capital became very important to the organization of the emergency response. However, local governments lacked the fiscal and human resources to capitalize on this grassroots organization or engage it in a sustained dialogue or program for action (Irazábal et al., 2015). In part, this incapacity reflects the fact that pre- and postdisaster planning is generally undertaken at the regional and central government level and not in the municipalities, whose levels of human and fiscal capacity are extremely diverse.¹¹

The absence of coherent protocols for action was also evident, as an official from the Ministry of Housing in the Maule Region pointed out:

The subject of reconstruction, where we failed as a ministry and as a country . . . we don't have a protocol for this sort of stuff. Because sometimes the river floods, and everything falls apart [*queda la escoba*], the volcano, and everything falls apart, the tsunami, and everything falls apart. There is no protocol, so you have to act on the fly, and often that takes a lot of time, because you have to start asking a lot of questions.

This view was echoed by officials from the central government (interview, Santiago, May 2014): "I think that as a country we lack a logic of formal protocols. The whole thing worked on a case-by-case basis, almost as if, when there was a good relationship between the mayor of the moment and the municipality's housing staff and the regional or central government, then everything worked well, while if they didn't get on with whomever, then it didn't."

In general terms, it was the municipal administration that organized the emergency response to the disaster, while the central government and its regional agencies took on a more active role in the reconstruction process. The tasks of the municipal administration consisted of surveying the damage

caused by the earthquake, distributing food and clothing, organizing emergency housing, providing emotional support, and managing a makeshift morgue. The level of commitment of municipal officials was highly valued even when people described a lack of organization in the response to the emergency during the first few days. According to a representative of the municipality's Dirección de Desarrollo Comunitario (Department of Communal Development) (interview, Constitución, 2013):

Well, in reality, I could tell you about four or five functions that were clear, but at the same time they were also diffuse, because there was so much demand for everything and from everybody that things were difficult. For example, I can tell you specifically that during the first days, even though I was in charge of education, the next day I was in charge of the transitional morgue or in charge of distributing water. I was also involved in distributing food. We ended up giving out 21,000 daily rations. . . . I took on the job, I think, even though it didn't correspond to what I was supposed to be doing.

The lack of coordination and direction meant that many resources received from NGOs and international organizations often did not correspond to the immediate needs of the population or did not reach it in a timely manner. The confusion and helplessness at the municipal level was compounded by the fact that the earthquake occurred just two weeks before a change in government. Municipal officials complained that after the handover they lost their networks in the public administration (interview, Constitución, 2013):

Before the handover, you knew whom to call. We all had networks that extended to other communities and to the regional government, even to people in Santiago. But when Piñera took over, everything changed. Many positions weren't even filled. You didn't know whom to call to get anything done. It was a mess—all new people, and they were clueless. You have no idea how this slowed things down.

From the perspective of the inhabitants of Constitución, the emergency efforts were uncoordinated, ineffective, and basically chaotic. Once the emergency had been overcome, one of the most complicated policy issues was the selection of beneficiaries for the various reconstruction programs that were instituted, especially those related to housing destroyed by the earthquake and tsunami. This is where the discussion of targeted benefits in an emergency situation becomes very relevant, since most of the programs directed at the reconstruction of housing required an FPS and not every household affected by the earthquake had one. One senior representative at the Ministry of Housing (interview, Santiago, May 2014) defended the use of the FPS, arguing that the majority of Chilean households had been interviewed for an FPS and therefore this information was readily available:

Many of these families didn't have an FPS, but the majority did. In Chile, there are about 5 million households, 3.8 million of which are covered by the FPS. If you look at this by quintile, it's pretty obvious: the first quintile is almost fully covered by the FPS, almost 100 percent, and after that the proportion declines. In the fifth quintile it's pretty low. . . . The FPS wasn't really a limitation, because in the cases where people didn't have it, we worked on a case-by-case basis.

It wasn't a limiting factor for us in getting to lower-middle-class or middle-class families who did not have the FPS.

However, according to our interviews, families that had not applied for any form of state benefits or aid prior to the earthquake had to overcome a series of obstacles to access reconstruction programs. A number of problems related to timing and information made the allocation of benefits more difficult. One employee from the municipal administration (interview, Constitución, 2013) confirms:

People would say: "I can't apply. I suffered damage, but I was living with So-and-So," and that's where the problem happened with the FPS. They simply didn't have their own forms, so they had no right or simply didn't go to the housing department so that it could analyze the state of their housing and declare it inhabitable. From there you had to go to the SERPLAC [Secretaría Regional para Planificación y Coordinación (Regional Agency for Planning and Coordination)] to get a certificate of damage. So a lot of people didn't know what to do. They'd come here and say, "Look, here I have my certificate of inhabilitability, but I can't apply." . . . By then the application deadline had passed, and that's when they'd find out that they had to go to the SERPLAC.

Knowledge and information about how the FPS system worked was also unequally distributed among the population (local coordinator of the *Movimiento Nacional por una Reconstrucción Justa* [National Movement for a Just Reconstruction], interview, Constitución, 2013):

It was all completely disorganized. In the sector of La Poza [a historic neighborhood of fishermen], people know the benefit system. . . . so there were people who knew how this worked and they worked the system very well, but there were loads of people who had never in their life [applied for a benefit], who've always worked and bought stuff with their own efforts who didn't know anything. So they were abandoned.

The fair allocation of the benefits was questioned by many residents. One woman from Villa Verde, a middle-class neighborhood, said (interview, Constitución, 2013):

For example, there are lots of people who were left out. I know of two women who are the same as me—they live off their wages and nothing else. And here you see quite a few people who have two cars. Here in our little street, my neighbors have two tremendous cars, stupendous. That is, you can tell they're not for this kind of housing, so how the hell did they end up here? She's a policewoman. I don't know how much a policewoman earns. She's really well-off, and everyone looks at her thinking, "Hmmm."

Other problems emerged that derived from the application of a public policy tool designed for normal circumstances to a postdisaster reconstruction process. The FPS is an instrument that is applied by municipalities at the local level. Municipal administrations tended to inflate the damage that their communities had incurred and then use the funds received to obtain political support from their voters—a clientelistic practice that exacerbated the lack of transparency and fairness in the allocation of funds. This account coincides

perfectly with the more rigorous analysis of this topic by Forttes (2014: 19), which concluded: “The FPS became the main gateway through which beneficiaries could go to obtain support. In this context, innumerable reports from the affected population highlight the lack of rigor in its application. This situation has been recognized by the current government.” In addition, the circumstances of families change abruptly as a result of such a natural disaster. Because the FPS could not measure the complexity of this change in circumstances, the government decided to freeze the point scores obtained through the FPS at pre-earthquake levels.¹²

Another weakness was the lack of coordination among institutions dealing with the impact of the earthquake and tsunami and the lack of empowerment of local institutions both in terms of the size and professionalism of their staffs and in terms of their capacity to make independent decisions (Mella, 2012). As discussed above, this process was compounded by the change of government that occurred only a few days later.

The second phase of the reconstruction was initiated with the formulation of the Plan de Reconstrucción Sustentable (Sustainable Reconstruction Plan). The formulation of this plan was funded by Celulosa Arauco, one of the main forestry conglomerates in the Bío Bío Region. Arauco hired architecture and public relations firms to develop the plan (see Irazábal et al., 2015; Tironi, 2014), and the government then funded the reconstruction itself (Forttes, 2014). The support of Arauco was highly valued by the residents but also produced conflict. A piece of land was donated by the company on the condition that half of the houses built be for Arauco employees affected by the catastrophe. The difference between Arauco workers and the rest of the inhabitants generated a series of problems. Some local residents were skeptical of the company’s motives, which they considered to be a form of “image laundering” by a firm that had “ruined a once fine seaside resort” and caused widespread environmental devastation in the area (Tironi, 2014). One community leader argued (interview, Constitución, 2013):

Yes, Arauco is mixed up in all this. . . . If you look carefully, there are lots of things where Arauco has invested money, like in the football field . . . that was built by Arauco which then gave it to the municipality. They’re building a cultural center. Arauco is also in on that one. They will begin to build a library, also Arauco. So there’s a lot of stuff where Arauco is involved. . . . But in reality what they’re interested in is the road, in expanding the road, making it wider for the transport of timber. We all know that that’s the reality. Arauco’s involved in that too.

Other private or nongovernmental organizations also participated in the reconstruction process and filled gaps in the public provision of goods. However, these entities acted independently, mostly without linking their actions to the master plan, to provide quick solutions for specific problems.¹³ Private organizations in general had the ability to respond quickly and appropriately to the most pressing population needs, as opposed to the government, whose processes were delayed by bureaucracy and inefficiency. One municipal official from Constitución (interview, Constitución, 2013), for example, described his contact with Felipe Cubillo, head of the foundation *Levantemos Chile* (Rebuild Chile), as follows:

After a few telephone calls, I got hold of his number. I called him quite a few times, like, 11 times, and he answered. That's when I met him. We greeted each other and he said, "Which school was destroyed?" We went to see the school, the Enrique Donn School, and he said to me, "And where do we put a modular school?" And we went to the place, and after half an hour he said, "Okay, this is where we put the modular school." . . . Much quicker—imagine, in half an hour he decided all these things. . . . And after that it's a well-known story. On April 27, if I remember correctly, around that time they inaugurated the modular school, with a capacity of 1,000 students, because Felipe understood that if the children had a place to go to where they could eat and be looked after all day, it would give parents the chance to rebuild their houses, get rid of the debris, etc.

The evidence presented here illustrates the extent to which the precarious institutional capacity of Chile's municipal administrations was overwhelmed by the 2010 earthquake and tsunami. Municipalities had no administrative protocols for dealing with emergency situations and lacked the capacity to execute reconstruction efforts, and they could not take advantage of the local NGOs, private donors, and organized citizen groups that were operating in the area of Constitución at the time because they lacked both the resources and the expertise to coordinate their activities. In addition, relying on the same social policy tools that were applied under normal circumstances proved extremely complicated and ineffective. As a result, even though the reconstruction plan for Constitución had an integrated vision for the reconstruction of the territory, most of this plan was not executed (Irazábal et al., 2015).

CONCLUSIONS

Chile is very well prepared for natural disasters in terms of preventing material damage. The establishment and effective enforcement of appropriate earthquake-resistant building codes illustrates the strength of Chile's institutions for regulating and enforcing legislation when political will and attention are directed toward an issue. The country is much less well prepared for dealing with the effects of a disaster both in the first phase of emergency response and in the second phase of long-term reconstruction. Administrative decentralization for the postdisaster response has been shown to be inefficient. The way in which local institutions coped with the earthquake and the subsequent reconstruction process illustrates that they were ill equipped to deal with an emergency at the local and regional levels, not being empowered to act independently of the central government and lacking independent resources. The complications generated by a change in the central and regional governments during the period immediately following the earthquake further illustrate the need for a permanent and independent civil service structure. At present civil servants in leading positions at all levels of government and especially at the local and regional levels are appointed according to political criteria and often according to the role they played in the most recent local elections rather than according to their actual capacities and administrative experience and capability (Sehnbruch and Siavelis, 2014).

The fact that the state used established mechanisms for benefit allocation in those social policy areas where it did intervene points to a lack of institutional capacity and planning for social emergencies. In particular, this logic ignores the fact that it is not only the poor who are vulnerable in a natural disaster. Higher-income groups, in particular Chile's emerging middle class, are equally vulnerable, and the targeted approach to reconstruction benefits by definition excludes the middle class. That public officials did not question the logic of targeting resources in a postdisaster situation shows that this logic is deeply ingrained in Chile's institutional framework. This also explains why the Chilean state has not established an alternative regime for allocating social benefits in an emergency situation. The expansion of the engagement of the private sector through public-private alliances such as the reconstruction plan for Constitución also highlighted the limitations imposed by a lack of clear institutional structure. The reconstruction initiative was unsustainable financially and in terms of human resources and therefore ended up as a failed attempt to involve a private business in the functions of the state.

Thus, although the Chilean state has had the capacity to enforce strict earthquake-resistant building codes, it has never had the capacity to deal adequately with the reconstruction process that must follow a disaster. While we are dealing with an atrophied state that was born out of a neoliberal legacy, we are also dealing with a modern state that has not invested adequately in its own development. The expectations of the Chilean population therefore significantly outpaced the capabilities of the state.¹⁴ A future social policy infrastructure for natural disasters should consider the recommendations made by the international literature, which as a first emergency response suggests establishing cash transfers for victims of natural disasters that can be disbursed rapidly on the basis of the damage suffered by a particular town or geographical area. A second level of institutional response must focus on preventing poverty and declines in employment. This means organizing the reconstruction effort with labor force participation in mind rather than simply leaving the allocation of jobs to the market. Procedures for reconstruction grants and loans should be simplified: a single certificate of damage should automatically entitle a household to benefits.

By 2014, government indicators showed that 90 percent of lost housing infrastructure in the affected regions had been rebuilt or repaired through the normal procedures for building social housing in Chile.¹⁵ However, the evidence also shows that the application of the three principles of social policy in Chile—targeting, decentralization, and privatization—results in profoundly flawed allocation in the context of postdisaster emergency and reconstruction processes. In Chile, disasters happen on a regular basis, and institutions that are equipped to deal with them are much needed.

NOTES

1. This change was due to the findings of a longitudinal survey that showed that, although only 13 percent of the population fell below the official poverty line, 40 percent of households were vulnerable and had fallen below the poverty line at some point. A description of the policy instrument used to define "poor" can be found in Herrera, Larrañaga, and Telias (2010).

2. The 18 interviews included a high-level representative of the Housing Ministry, a researcher specializing in reconstruction and urban planning, 11 residents and community leaders, 2 representatives of the municipal administration, 2 representatives of regional government agencies, and the representative of a large company in the region. They were carried out during August and September 2013 by members of the Observatorio de la Reconstrucción (Observatory of the Reconstruction) and the Centro de Investigación de Vulnerabilidades y Desastres Socionaturales (Research Center on Vulnerability and Socio-natural Disasters) of the Universidad de Chile. The principal objectives were to reconstruct the response to the earthquake in Constitución, identify critical junctures in the process, and explore experiences of collaboration and conflict.

3. Historically, the Corporación de Fomento y Reconstrucción (Chilean Economic Development Agency—CORFO) was charged with reconstruction issues, but its mission has since expanded to include broader development issues to the detriment of reconstruction policies.

4. The Return to the Sea program had a very limited impact. According to official reports, the maximum subsidy that was received by 67 beneficiaries was 2,100 pesos (approximately US\$3,500 at the time), depending on the damage incurred by individual fishermen. The subsidy was designed to help fishermen replace their boats, engines, and fishing equipment and covered 25–50 percent of the total cost of the equipment. Equipment that was not covered by the subsidy had to be acquired through personal funds or bank loans (Imilan and Fuster, 2013). Official statistics show that between 2010 and 2011 the total number of active fishing boats declined by 19.7 percent (Contreras and Winckler, 2013).

5. In addition to being targeted, these benefits were limited in number, creating a quota system. Potential beneficiaries had to apply for benefits and would be put on a waiting list to receive them.

6. Atria et al. (2013) point out that when policy makers began to think about reforming Santiago's bus system, they did not even consider establishing a public transportation system but instead worked with a fragmented private system in which multiple providers had to be regulated and monitored. It is hard to see how a citywide transportation system can be considered a "private issue."

7. This statement is based on a presentation made by the Undersecretary of Housing, Andrés Iacobelli, on November 27, 2012, during the third session of the Plataforma Regional para la Reducción de Desastres en Las Américas (Regional Platform for the Reduction of Natural Disasters in the Americas) in Santiago. On September 25, 2013, Andrés Gil Santa Cruz, at the time coordinator of the National Reconstruction Program, during a debate at the Universidad de Los Andes, made the same point. Neither of these two representatives of the government in any way questioned the use of normal policy tools during a postdisaster situation.

8. Sanhueza, Contreras, and Denis (2011) found that the earthquake and tsunami particularly affected the health of the older population.

9. Sanhueza, Contreras, and Denis (2011) analyzed the effects of the earthquake on five dimensions of well-being: education, health, housing, income, and employment. They used the Alkire and Foster (2007) methodology to construct an aggregate indicator of multidimensional poverty focused on specific age-groups (children, adults, and the elderly) and found that the earthquake negatively affected children in this regard.

10. The reestablishment of schools and hospitals during this period was dealt with by the Ministries of Education and Health and did not use the mechanisms of social policy allocation that we are discussing here.

11. Municipal governments were supposed to coordinate reconstruction plans at the local level, but in practice their role was limited both in planning and in execution (see Imilan and González in this issue). The fragile state of municipal administrations with regard to human and fiscal resources can be explained by the fact that the central government, following a neoliberal logic, does very little to redistribute resources between rich and poor municipalities. Although there is a fund for such redistribution, its redistributive capabilities are extremely limited, with the result that individual municipalities have to rely on the taxes that they themselves can raise (Valenzuela, 2012).

12. <http://www.eldinamo.cl/2012/01/24/ficha-de-proteccio/> and <http://www.biobiochile.cl/2011/04/30/fps-mideplan-congela-puntajes-y-conserva-indices-previos-al-terremoto.shtml> (accessed June 28, 2013).

13. In July 2010 the Chilean government established the Fondo Nacional de Reconstrucción (National Reconstruction Fund) (Law No. 20.444), which brought together all private donations to the reconstruction effort and made them tax-deductible. The fund was administered by the Ministry of Finance, independently of the master plans that were being developed, as donors could specify where they wanted the money to be spent. In Constitución this fund financed equipment and infrastructure for 16 projects, but only one of these was linked to the city's master plan (Imilan, Fuster, and Vergara, 2015).

14. Current political discussions show that the arguments presented in this paper have been taken into account by the Bachelet administration and that the new legislation will address many of the institutional criticisms made here.

15. Only in remote rural areas was the reconstruction process still incomplete. The reconstruction of housing units was carried out by local municipalities, which would assign the housing benefits and then charge the local social housing administrator with the construction. Social housing administrators may be nonprofit organizations or private entities that operate for profit or may be run by local municipalities. In the case of the postearthquake reconstruction process, most housing contracts were awarded to municipal providers, since they were not lucrative enough for the private sector.

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