

Building climate resilience through social protection in Brazil: the *Garantia Safra* public climate risk insurance programme

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Exacerbated climate risks disproportionately affect poor and vulnerable citizens in the global South. When left unprotected, they are likely to fall deeper into poverty. Rural populations engaged in smallholder agriculture are particularly affected as climate extremes become more frequent and severe. Due to their dependency on the climate, extreme events such as heavy rains and droughts have long-term impacts on their assets, income and food security. As recognised at global level, these long-term impacts need to be addressed by long-term measures to build climate resilience among the most vulnerable communities, ensuring they can prepare for, respond to and recover from shocks and stresses. Among existing tools, social protection stands out as a proven set of instruments when it comes to tackling risks in the context of poverty and vulnerability.

Against this backdrop, the public index-based climate risk insurance scheme *Garantia Safra* in Brazil offers an opportunity to assess the role of social protection in building longer-term climate resilience. Based on a survey conducted by Brazilian authorities and the World Bank in 2016, a quantitative analysis explored *Garantia Safra*'s potential to enhance the adaptive capacity of poor and vulnerable smallholder farmers in the state of Ceará (Kühne 2020). Adaptive capacity—a resilience capacity that represents the ability to adjust to changing climate patterns in the long term—is enhanced when smallholders are not only provided with protection during climate extremes but are also incentivised to engage in prevention beforehand. This perspective on resilience adds a preventive element to the current focus on short-term social protection interventions after shocks.

In recent years, index-based climate risk insurance has been advocated as an innovative tool to build resilience to climate extremes. Insurance can benefit poor and vulnerable smallholder farmers by serving as emergency support (protective function) and displaying a sense of security that incentivises positive risk-taking (preventive function). Within index-based schemes, crop losses are no longer assessed individually but collectively for all farmers within a predefined area (e.g. municipalities). Indices, based on weather parameters such as rainfall levels, are used to determine losses in case of an extreme event. Payouts occur when a certain threshold of estimated crop losses is reached. This approach, besides being cost-effective, reduces phenomena prevalent in traditional insurance schemes such as moral hazard.

In 2003, Brazil became one of the first countries in the world to establish a tax-funded, State-run index insurance scheme. *Garantia Safra* targets poor and vulnerable smallholder farmers in drought-prone regions, mostly in the states of the Northeast region, with a high incidence and depth of poverty. Working as an income

guarantee scheme, *Garantia Safra* represents a crucial instrument within the region's social protection strategy.

When it comes to building resilience, the analysis found little proof that *Garantia Safra* contributes notably to the adaptive capacity of its beneficiaries. It revealed that the programme is a protective instrument providing relief after climate extremes but that it lacks a preventive function. In this light, the results suggest the following implications regarding public climate risk insurance:

- Only well-functioning schemes with timely and adequate payouts gain farmers trust and, therefore, incentivise prevention. To this end, data on actual losses are key and require investments in satellite and weather data.
- Public insurance solutions alone cannot be expected to build farmers' long-term resilience; nor can they replace more comprehensive social protection systems. Especially in regions with a high incidence of poverty, a holistic approach that interlinks complementary programmes with the same target groups is needed. This requires the use of information management systems (e.g. social registries).
- It needs to be clear what to expect from insurance and when other tools are more suitable. In a context of recurrent climate extremes, humanitarian cash transfers delivered through existing social protection programmes such as *Bolsa Família* can be more effective than a more complex, index-based insurance approach.
- There is a need to consider maladaptation. When public insurance schemes do not deliver sufficient positive results, they might promote unsustainable livelihoods without offering exit strategies. In the case of *Garantia Safra*, migration needs to be considered as a strategy to build resilience in the long term.

The results shed light on the importance of further assessing existing tools to enhance the climate resilience of the poorest and most vulnerable members of society. As the changing nature of climate extremes is already transforming the face of poverty and vulnerability, old and new types of social protection will inevitably need to prove their potential to combat climate challenges.

Reference:

Kühne, Elena. 2020. "Building climate resilience through social protection in Brazil: The *Garantia Safra* public climate risk insurance programme". IPC-IG Policy Research Brief no. 70. Brasília: International Policy Centre for Inclusive Growth.