

Impacts of the *Fomento* Programme on family farmers in the Cerrado biome and its relevance to climate change: preliminary findings

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Over the last two decades, Brazil has been recognised for its social protection strategies aimed at reducing the vulnerability of populations to hunger and food insecurity. One of those, the Programme for the Promotion of Rural Productive Activities (*Programa de Fomento*), was established by Law No. 12.512/2011 with the goals of stimulating job creation and income generation, promoting food and nutritional security, and encouraging the participation of beneficiaries (those living in conditions of poverty and extreme poverty) in social, educational, technical and vocational training, as well as promoting their participation in associations and cooperatives. Overall, the programme has been demonstrated to be effective in generating a multitude of impacts, derived from the technical assistance and rural extension provided for two years, and non-reimbursable financial aid applied to productive projects chosen by the producers based on their specific needs and context.

As observed in the literature, several positive impacts were identified, such as improvements in productive and non-productive resources, income and productive capacity, food and nutritional security, and access to other public programmes, among others, in the different regions of Brazil. The importance of the programme emerges even more for certain areas, such as the Cerrado, given that climate models have indicated that the biome will experience significant changes in temperature and precipitation due to climate change, impacting the most vulnerable populations. For this biome, projections indicate temperature increases of 1°C up to 2040, 3–3.5°C between 2041 and 2070, and 5–5.5°C between 2071 and 2100, with decreases in precipitation of 10–20 per cent up to 2040, 20–35 per cent between 2041 and 2070, and 35–45% between 2071 and 2100 (PBMC 2014).

Thus, given the multitude of impacts attributed to the *Fomento* Programme and its potential positive impacts in the face of climate change, this research¹ aimed to understand the programme's impacts on productive and socio-economic characteristics that may favour family farmers' resilience in the long term. Interviews with beneficiaries were carried out between February and May 2018 in two of the administrative regions within the Federal District of Brazil (Sobradinho and Gama). A total of 10 beneficiaries were interviewed with a qualitative questionnaire, which was tabulated and treated quantitatively for this discussion.

Before the introduction of the programme, most (80 per cent) of the interviewees had already developed some agricultural productive activity on their property, with half reporting that the programme had led to a change in their main productive activity, which mainly consisted of changing the relative importance of items produced, and/or the

introduction of items not previously produced. All respondents reported that their income had increased through the sale of items and the decrease in the need to purchase certain foodstuffs (which were produced afterwards). Some beneficiaries also reported higher consumption of fruits and vegetables, and the generation of savings due to the production of meat and eggs. Only 30 per cent mentioned producing new food items due to the *Fomento* Programme. Technical knowledge was increased by the guidance provided by technicians and by the courses offered, which developed the beneficiaries' capacity to produce new items, use new ways of handling production and enhance productive capacity as a whole. The use of new techniques and equipment was cited by 90 per cent of respondents. Besides, 70 per cent cited improved community relations, and 90 per cent claimed greater confidence as a producer. The programme would have increased contact between members of the community and their social circle (reflected in sales opportunities), while the increased knowledge gained from agricultural extension services made farmers feel more capable of producing independently.

All respondents declared being able to sell part of their new produce to local markets (50 per cent), government programmes (10 per cent), other schemes (20 per cent) and neighbours (100 per cent). Despite being able to sell their produce, 60 per cent of respondents stated that there were difficulties selling, such as a lack of transport, points of sale, and machines to process production. Forty per cent stated that they noticed the influence of climate on production and climatic shifts over the years, more events of elevated precipitation, and the unpredictability of the climate, with impacts of rain on animals (such as diseases), droughts on crops, and forest fires affecting production. About 20 per cent did not know how to answer this question. The programme would also help farmers stay in their rural areas (according to 100 per cent of respondents), as it acted as an incentive, helping to develop projects, providing an occupation and improving income, food security and well-being. In a scenario of climate change and its related variables, the programme appears to be of great importance in improving farmers' lives and resilience in the face of future impacts. Moreover, further research is deemed necessary to understand the impacts of social protection programmes on vulnerable farmers in the Cerrado biome, as well as their interconnections with climate change.

Reference:

PBMC. 2014. *Base científica das mudanças climáticas. Contribuição do Grupo de Trabalho 1 do Painel Brasileiro de Mudanças Climáticas ao Primeiro Relatório da Avaliação Nacional sobre Mudanças Climáticas*. Rio de Janeiro: Coppe, Universidade Federal do Rio de Janeiro.

Note:

1. Developed during a partnership between the Climate Network (Rede CLIMA—Regional Development sub-network) at the Center for Sustainable Development (CDS) of the University of Brasília and the former Ministry of Social Development (MDS).