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Manejo de Agroecossistemas
e Agricultura Orgânica



Caminhos para o Manejo Agroecológico através de participação no Programa Nacional de Alimentação Escolar (PNAE) em Santa Catarina, Brasil

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Resumo

A agroecologia, como movimento social e disciplina científica, aplica princípios ecológicos à concepção e gestão de sistemas agrícolas para melhorar os Resultados ambientais e os meios de subsistência dos agricultores e das comunidades rurais. No entanto, poucas pesquisas até o momento avaliaram os mecanismos políticos que poderiam facilitar o aumento da adoção de práticas de manejo agroecológico. Investigamos se e como os programas públicos de aquisição de alimentos que proporcionam incentivos financeiros para a produção orgânica e agroecológica podem mitigar os principais desafios à transição agroecológica. Pesquisamos a experiência dos participantes do Programa Nacional de Alimentação Escolar (PNAE) em Santa Catarina, que oferece tanto um mercado estruturado para agricultores familiares quanto um preço maior para sistemas de produção agroecológica certificados. Os Resultados da pesquisa indicam que o PNAE fornece um incentivo econômico para que os pequenos agricultores comecem uma transição agroecológica criando um mercado diferenciado de preços que, de outra forma, está ausente no Contexto regional. No entanto, sem vínculos com as redes sociais - como a participação em associações de agricultores, cooperativas e programas de extensão agrícola não-governamentais que apoiam as práticas agroecológicas - a influência do PNAE é limitada em estimular uma maior ampliação da produção agroecológica.

Palavras chave: agroecologia, soberania alimentaria, Brasil

Abstract

Agroecology, as a social movement and scientific discipline, applies ecological principles to the design and management of agricultural systems to improve environmental outcomes and livelihoods for farmers and rural communities. However, little research to date has assessed the policy mechanisms that could facilitate increased adoption of agroecological management practices. We investigated if and how public food procurement programs that provide financial incentives for organic and agroecological production can mitigate key constraints to agroecological transition. We explored the experience of participants in Brazil's National School Feeding Program (PNAE) in Santa Catarina, which offers both a structured market for small-scale family farmers and a price premium for certified agroecological production systems. We found that the PNAE provides an economic incentive for small-scale farmers to begin an agroecological transition by creating a price-differentiated market that is otherwise absent in the regional context. However, without external network linkages – such as participation in farmers' associations, cooperatives, and non-governmental agricultural extension programs that support agroecological practices – the influence of PNAE is limited in stimulating a broader scaling up of agroecological production.



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Introduction

While some prominent international figures and organizations now promote agroecological practices (De Schutter, 2010a; FAO, 2015; IAAKSTD, 2009), and the science of agroecology continues to advance, little is known about the social and policy related factors that can most effectively encourage farmer transition towards agroecology. It is therefore critical to identify and evaluate policy and decision-pathways for transitions to agroecological management systems on family farms (FAO 2014; Schmitt Filho et al, 2013). Public food procurement programs are mediated market mechanisms that aim to use the power of public purchasing to achieve redistributive and development-related goals (de Schutter 2014; Wittman 2015). Public procurement includes the awarding of public food provision contracts that structured to create incentives for food producers to implement agroecological management. The potential benefits of such programs are increasingly documented (De Schutter, 2010a; Soares et al., 2013; Wittman and Blesh, 2017) and promoted by international institutions, such as the FAO and World Food Programme (WFP), as well as by social movements (e.g., La Via Campesina).

Despite increased interest in public procurement programs, understanding the social mechanisms by which such programs affect adoption of agroecology is a critical knowledge gap. We broaden the discussion of constraints on farmer decision-making in agri-environmental management by examining the case of Brazil's National School Feeding Program (*Programa Nacional de Alimentação Escolar – PNAE*) in the highlands of Santa Catarina. We explored the extent to which farmer decision-making about agroecological production practices is structurally constrained, and ask if and how participation in the PNAE can help mitigate constraints to adoption at the farm level. Specifically, the PNAE includes two components predicted to provide opportunities for agroecological transition: i) a local procurement mechanism and, ii) an economic incentive for producers who are certified organic and/or agroecological, including a 30 percent price premium and priority access to public food procurement contracts. We also examined the role of participation in agricultural networks (e.g., associations, cooperatives) and extension in agroecological transition.

Methods

To investigate how participation in the PNAE relates to mitigation of constraints on the adoption of agroecology for family farmers in Santa Catarina, we conducted a qualitative field study between May and August 2015 in three municipalities: Lages, Curitibaanos and Correia Pinto. These municipalities were purposively selected because they are in a region that has two main farmer groups selling to the PNAE: one affiliated with an NGO network specializing in agroecology extension and organic certification, and a



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second comprised of non-certified farmers organized through municipal Secretaries of Agriculture and Education. Participant selection was facilitated through PNAE administration in Lages and through an extension agent working with *Centro Vianeí* (the agroecology extension NGO) in Curitiba and Correia Pinto.

Results and Discussion

We outline the trends related to differences in production systems between certified, in-transition and non-certified farmers. We outline the most common economic constraints related to adoption of agroecological practices, and discuss the role of PNAE as a price-differentiated market. We then discuss the central role of agricultural networks, including extension agencies, suppliers and farmer organizations, in the creation and distribution of knowledge, and the social norms that facilitate the use and certification of agroecological practices through the *Rede Ecovida*. Costs associated with an increase in labour – demands on family labour or additional costs for hiring wage labourers – are a central concern for farmers using agroecological practices. In this study, three quarters of certified and in-transition farmers said that labour demands for agroecological production are higher relative to their experience when using conventional methods. When asked about the challenges of using agroecological management practices, 31 percent of the non-certified farmers highlighted their concern about reduced yields during – or even after – transition to agroecological production, as well as some concern about the quality of certified products. This demonstrates concerns about lower yields (production), but also reflects the perception that organic or agroecological production requires more labour.

One hypothesized mechanism to support a transition to agroecological practices is to provide price premiums for certified products to offset actual or perceived increases in costs or reduced yields. The PNAE offers financial compensation for organic and/or agroecological practices via price premiums. Our study found that the PNAE offers a unique but limited opportunity to participate in a price-differentiated market in study regions. Although these economic factors do affect some of the structural constraints farmers face, looking at the broad differences between certified and non-certified farmers suggests that the economic factors alone do not support transition. The composition of one's network, including suppliers, other farmers, and distributors are critical factors supporting transitions due to the facilitation of knowledge, skills and resources necessary for shifting to agroecological production.

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