

Sustainable Agriculture: An Assessment of Brazil's Family Farm Programmes in Scaling up Agroecological Food Production

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Agroecological methods of agricultural production have been shown to be an ecologically sustainable and socially and economically viable way to support national food systems (Altieri and Toledo, 2011; IAASTD, 2008). When the prices of key staple crops more than doubled during the 2008 food crisis, it became apparent that alternatives to the current global food system are desperately needed. The current global food system—from seed to supermarket—has become increasingly monopolised by agri-food supply chains. This has led to overproduction of food while simultaneously leaving roughly 925 million people hungry worldwide, and has also contributed to severe environmental degradation and malnutrition (IAASTD, 2008).

As a science and set of practices, agroecology is very knowledge-intensive, participatory, organised and innovative. Derived from the convergence of two disciplines—agronomy and ecology—agroecology implies farming methods based on diversification, biological interactions and agroecosystem synergies which generate and enhance soil fertility, productivity and crop resilience. In addition to its emphasis on sustaining the environment and social inclusion through participatory frameworks, agroecology-based models have produced impressive economic results in terms of yields, productivity and efficiency (Pretty et al., 2006).

Brazil's recent policy experience has demonstrated a commitment from the State to support family farmers in the transition to agroecological production. Initiatives under the Zero Hunger (Fome Zero) policy framework and the latest addition of a National Plan for Agroecological and Organic Production (PLANAPO) represent such efforts to provide incentives for producers nationwide to adopt new productive methods. McKay and Nehring (2013) analyse the current policies available for Brazilian family farmers to make an agroecological transition. Based on secondary research and qualitative fieldwork conducted in April 2012 in the northeastern states of Piauí and Ceará, the authors identify some key shortcomings in the overall policy design of some of Brazil's agroecological initiatives.

Part of the story here is what the authors call the 'Brazilian agricultural dilemma' or the contradictions and conflicts of disproportionately supporting large-scale agribusiness for export over small-scale family farm production for domestic consumption. This structure creates a dualism in the countryside where one system of agricultural production is favoured over the other. However, in contrast to large-scale agribusiness is a vast array of rural movements and farmer associations and cooperatives that provide a solid organisational base to implement and scale up agroecological policies. Brazil's recently launched PLANAPO is one such plan that intends to implement new policies and scale up existing initiatives.

The authors argue that, despite some commendable advances towards a transition to agroecology, Brazil's policies and programmes supporting agroecological initiatives must overcome four main weaknesses:

i) programme awareness; ii) technical assistance and extension services; iii) public-supported farmers' networks; and iv) scale-up. While the PLANAPO has addressed some of these weaknesses, the effectiveness of the on-the-ground implementation will depend on the relations between policy origins (state actors) and society. Further, Brazil's 'agro-industrial bias' and unequal land access relations present deeper, structural problems that must be overcome for the country to commit to a transition of nationwide agroecological production.

Despite such shortcomings, Brazil's policies and programmes represent a significant advancement and open up space for alternatives which will foster a transition to agroecology-based production. Notably, the Food Acquisition Programme (PAA) and the National School Feeding Programme (PNAE) offer incentives of a 30 per cent price increase to farmers that produce using agroecology-based methods. McKay and Nehring (2013) found that, for the PAA and PNAE to be effective in supporting an agroecological transition for its beneficiaries, a more comprehensive and flexible system of registration needs to be in place. This would facilitate not only the recognition of agroecologically produced food through the process but also inform producers about the 30 per cent price increase.

Brazil's transition to sustainable agriculture certainly has a long way to go. However, with continual improvements in the existing institutional framework supporting family farmers, as well as the recently launched PLANAPO, Brazil is making tremendous progress. However, its leadership in global agriculture spans two diverging trajectories—export-oriented agriindustry and sustainable family farming. Can these two conflicting agricultural development models co-exist or will one eventually lead to the demise of the other? While corporate interests and lobbying certainly side with industry, pro-reformists in favour of an agroecological alternative within the State and civil society must strategically and collectively organise to increasingly push for more support and redistribution of resources. Moreover, we must continue to critically analyse the economic, social and environmental effects of both agricultural models to reveal future outcomes and trajectories of agrarian change.

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