

How Can Petrobras Biocombustíveis Engage Small-Scale Farmers While Promoting Sustainability in Brazil's Biodiesel Programme?

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Our research indicates that Petrobras Biocombustíveis can help alleviate poverty among small-scale family farmers by enhancing stakeholder integration into the Brazilian biodiesel programme. This corroborates numerous studies pointing out the importance of stakeholder networks (Rowley, 1997; Roloff, 2008), which can be particularly significant in programmes that aim to incorporate small-scale farmers into internationally driven markets. Petrobras Biocombustíveis needs to improve the involvement of such farmers, especially in the northeast of Brazil, by identifying and engaging representatives of economic and social arenas to form stakeholder networks.

The success of stakeholder networks depends on the perception of a fair distribution of costs and benefits, verified by the ability of various institutions to command trust among stakeholders (Adger et al., 2006). But building trust is laborious, since repeated interactions involving information exchange and decision making are necessary. In that context, bridging organizations can play a fundamental role because they can mediate arenas or levels (constitutional, collective, ordinary) and facilitate the coproduction of knowledge (Cash et al., 2006).

They can provide a trust building forum that brings about vertical and horizontal collaboration and collaborative learning processes. In the case of the Brazilian biodiesel programme, such organizations can help overcome several of the policy inefficiencies that have been previously identified in the programme's design: (i) lack of final user engagement arenas; (ii) lack of mechanisms to build linking capital and entrepreneurship; and (iii) lack of mechanisms to offset institutional constraints (Zapata et al., 2010).

In Brazil's northeast, the community stakeholder network includes highly resourceful groups that, though marginally involved in the design of the biodiesel programme, had a negligible role in its implementation but can still play the role of bridging organizations. In particular, Petrobras Biocombustíveis could engage the Catholic Church, social movements and the universities to create strong networks. These organizations can link community networks to political and economic networks. Each of these stakeholders has particular resources

(legitimacy and mobilization skills, knowledge) and they command trust at various levels (constitutional, collective, operational).

Recent changes in the biofuels programme indicate that Petrobras Biocombustíveis is moving in the right direction to increase participation. There is evidence of more action situations, and opportunities for engagement may emerge. The firm has begun to deal directly with small-scale farmers, providing a wide range of support policies (technical assistance and free distribution of good quality seeds) and signing formal contracts. It is also supporting the creation of local associations and the use of other biodiesel sources, including sunflower and cotton, to include more farmers.

The research indicates that political and economic drivers have shaped the design and implementation of the programme, but institutional and socio-technical innovation have failed to take off because institutional arrangements have brought about disincentives to participate. As a result, the programme's primary and secondary effects have been disappointing as regards income generation, social inclusion and environmental protection. A chief source of disincentives is small-scale farmers' lack of involvement in the programme design, as well as the dominance of institutional and cultural arrangements that prevent small-scale farmers from using linking mechanisms to engage with external agencies. This suggests the need for policy intervention based on repeated interactions and community governance mechanisms, building trust and common understanding around potential course of actions.

References:

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