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"Filling gaps and removing traps for sustainable resource management"

## Food Sovereignty in Central America: A Comparison of Conventional and Regenerative Practices in Rural Communities

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## Abstract

Rural communities in Central America have been facing a series of intricate problems regarding crop production since the 1970s. On one hand, the agro-industrial complex dedicated to export crops (bananas, sugar cane, papaya, cacao, coffee, oranges, etc.) have continued to accumulate the most fertile and suitable lands. Large private landowners, as well as private companies, have relied on the key principles of conventional farming, namely: monocropping, high external input use, mechanisation, improved seed varieties and/or hybrids and cheap local labour. Public policies, marketing and the perception of peasants transitioning being transformed into agricultural workers have all served to promote the conventional crop production system as a panacea and the only possible way to achieve modernity and progress.

All these factors have contributed to a copycat effect in rural communities, where peasants try to imitate and apply the principles of conventional agriculture. With low capital and in marginal lands (steep slopes, swamps, isolated, etc.) mechanisation has been almost impossible to achieve, but the use of improved seeds and synthetic inputs has been extended through government subsidies programs and international cooperation agencies using the agro-industrial complex as their supplier.

High synthetic chemical use has created an environmental and health crisis as well as debt and economic dependency for peasants' households. Monocropping and the preference for cash crops has negatively affected the diets of rural households.

This study compared the production diversity and its effects on dietary conditions of rural households that have adopted the principles of conventional agriculture with those households that have kept regenerative agriculture principles (crop diversity and associations, local seeds and crops, organic fertilisation, etc.).

The study was based on direct measurements of crop diversity in plots and food diversity in kitchens, as well as semi-structured surveys in a stratified sample of 540 households distributed among 25 rural communities of three countries (Belize, Honduras and Panama).

The results concluded that households practicing regenerative agriculture have a more diverse diet, more protein consumption, and less dependency on external purchases when compared to households practicing conventional agriculture.

Keywords: Central America, food sovereignty, nutrition, regenerative agriculture

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