Mordt, M. Livelihoods and sustainability at the agrarian frontier. The evolution of the frontier in Southeastern Nicaragua. Publications edited by the Departments of Geography, Göteborg University, Series B, no. 99, 321 pages. Department of Human and Economic Geography, School of Economics and Commercial Law, Göteborg University, Göteborg, ISBN 91-86472-38-0

This doctoral dissertation explores how agrarian frontier societies evolve. Household livelihoods in three areas in the Southeast of Nicaragua, which have been colonized at different time periods, are examined from the point of view of their ecological, economic and spatial sustainability. The social aspect is approached through the concept of "contracts with nature", which illustrates different arrangements – formal as well as non-formal – that are made as regards to natural resource use.

A multi-method approach is used, combining regional geography, systems thinking and an actor approach, placing individual case studies within a regional context. Semi-structured interviews have been made with 85 households, complemented by field observations. Different farming systems have been compared as regards to their ecological impact and economic outcomes, and related to spatial occupation processes.

A central question of the research has been whether the current use of the natural resources allows for sustainable livelihoods at the frontier. In this sense, old agrarian frontier areas can be seen as prototypes of ecological degradation, which will be followed by areas with more recent settlement. Economically, the majority of the population at the frontier lives under subsistence conditions. Where an accumulation has occurred, it has been unevenly distributed and parts of the population have been impoverished. Spatially, migration to new frontier areas continues, and the major *foci* of expulsion are today found in old agrarian frontier territories and in areas where ranching is the dominant farming system.

However, the frontier is not a homogeneous entity that should necessarily follow a deterministic pathway. There are signs of change, both in old and new frontier territories. In neither of the research areas are these changes dominant, but they should be viewed as part of a process, which is gradually changing the populations' verbal discourses, and material practices related to livelihood strategies. It is argued that behind this change in discourses are a blend of factors related to personal experiences in former frontier areas, the impact of external organizations in the form of agrarian extension and sustainability-discourses, and finally, the legal environmental framework that establishes protected areas.

A principal conclusion of the research is that the prototype of agrarian frontier peasant as commonly pictured in the debate should be modified. The population entering the new frontier today is not the same as formerly, but arrives to new territories with different sets of experiences and knowledge. The structural circumstances have also changed, mainly in the sense that environmental issues have entered the scene.

Keywords: livelihoods, agrarian frontier, ecological, economic and spatial sustainability, spatial occupation processes, contracts with nature, farming systems, migration, land tenure, natural resource use, Southeastern Nicaragua, Los Guatuzos, Nueva Guinea, El Castillo.

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