

Towards a re-evaluation of the land sparing vs. land sharing debate from the perspective of peasant farming systems

Dr. A. Cristina de la Vega-Leinert
Geography and Geology Institute, Ernst-Moritz-Arndt University Greifswald

Summary:

Worldwide agricultural land is a scarce and degraded resource, while the commoditisation of nature spatially decouples the socio-environmental impacts of production, trade and consumption.

Sustainability, an explicit political and social desirable norm, seeks to reverse the Nature's degradation, while fostering human well-being in a fairer society. An often unchallenged premise is that synergies between environmental, economic and social spheres *exist* and *can* be exploited to harness global change. However, social groups and actors compete for resources and their goals are often mutually exclusive. Implementing sustainability thus implies prioritisation, choice, winners and losers over different spatial and temporal scales.

The land sparing vs. land sharing framework, which stems from the ecological modelling community, has provoked a vivid debate on which land use strategies are most appropriate to best face global change. I propose a critical re-evaluation of this debate, through an analysis of its implications for Latin American coffee peasant systems.

(150 words)

Current land use (LU) transformations are associated with multiple scale processes, from globally-driven tropical deforestation to local coping strategies. Agricultural land is becoming worldwide scarce, land grabbing is growing and unsustainable LU is rife. Further, the delocalised commoditisation of natural resources contributes to spatially decouple the socio-environmental impacts of production, trade and consumption, while efforts to promote sustainable LU often lead to a simple geographical displacement of unsustainable practice.

Sustainability seeks to reverse the degradation of Nature, while fostering human well-being in a fairer society. This dominant normative concept has become, at least explicitly, a politically and socially desirable norm. An often unchallenged premise is that synergies between the interrelated environmental, economic and social spheres of sustainability *exist* and *can* be exploited to harness global change. This has strongly inspired environmental discourse, policy and practice, which fundamentally, seek to reconcile resource use AND non use, local development needs AND global consumption demand, protection of intrinsic values of Nature AND preservation of resources for future generations, etc. Nevertheless, actors at all scales compete for land and resources and the goals they pursue are often mutually exclusive. Conflicts emerge at least partly caused by, and reinforcing, unequal access to resources. In practice, irreconcilability of purposes often prevails. Implementing sustainability, therefore, implies prioritisation and choice, winners and losers.

To illustrate these issues I focus on the land sparing vs. land sharing debate, which stems from the ecological modelling community and has provoked a vivid exchange of views on which LU strategies are most appropriate to best face present and coming challenges. In a nutshell, to secure global food and energy needs, while preserving life-sustaining ecosystems despite climate change, land sparing stresses global functionality through specialisation and spatial segregation. It implies agricultural intensification, the abandonment of low-yield agriculture in marginal areas, the formal designation and effective management of conservation areas and indirectly encourages rural-urban migration and urbanisation. The major players here are from governmental, agro-industry and conservation sectors at international and national scale. In contrast, land sharing fosters the spatial integration of agricultural and conservation activities, based on multiple LU in a diverse landscape matrix. This approach encourages the maintenance of traditional, cultural landscapes, fosters agro-ecological diversification at local to regional scale and is compatible with dispersed rural population. Peasant farmers play here a key role in producing their own food while local to international (non) governmental actors should contribute to resolve structural obstacles.

Recently the dichotomy is being left aside and scholars converge on sustainable intensification of agriculture as a middle path to addresses the critical challenges ahead. In essence, however, this debate remains conceptually and methodologically unresolved. Even though the debate clearly is in continuity with the Club of Rome's "Limits to growth", it remains embedded on a paradigm of growth. The imperative to grow is not fundamentally questioned; instead the task becomes to manage the growth sustainably.

I aim to contribute to a critical re-evaluation of the land sparing vs. land sharing debate, through an analysis of its implications of for peasant agriculture, with special consideration of Latin American coffee farmers.

Peasant farmers are important actors over multiple scales, who besides subsistence staple food, produce key export crops, though receiving a minute portion of final added value. They drive the preservation of rich (cultural) landscapes and ecosystems, seek new commercialisation pathways and experiment with sustainable LU. They contribute to ecological degradation through land conversion, though they are also dissidents, who resist against top-down resource use restrictions imposed on them. As land scarcity increases, landless farmers contribute to rapid urban growth, multi-local households and North – South financial fluxes through remittances.

Though from a top-down, macro-perspective, land sparing may favour forest regeneration, biodiversity protection and agricultural productivity, in the dominant market-oriented paradigm peasant farming economies are penalised, though having the potential of preserving local landscape diversity and achieving food security. From the point of view of peasant farmers, therefore, land sharing seems more appropriate. A range of strategies can be associated with land sharing, although the main challenge here lies in raising the productivity of multiple LU systems, while restricting environmentally damaging practice.

Profitability is a term that does not seem naturally related to subsistence systems, which often are seen as the antithesis of commercial agricultural systems in market economies. However, peasant farming systems are often key producers of traditional cash crops (coffee, cocoa), so even if peasant systems are still embedded in a subsistence economy, they directly or indirectly depend on the market. Until the 1980s the state often mediated between peasant communities and the market; for example as state firms secured minimum prices. Through debt crisis, structural adjustment programs and ensuing economic liberalisation peasant economies are undergoing extreme changes. Peasant farmers have been pushed to progressively replace staple crops with cash crops and to integrate the monetary economy. Monetary income and profitability thus becomes a key factor, rather than a welcome additional resource. Though peasant farmers often struggle to integrate markets, they have become increasingly dependent from them. In short, they are been successfully hooked up into the market economy. Profitability from basic primary cash crops depends on highly fluctuating world market dynamics and prices. Peasant farmers, therefore, seek strategies to intensify LU, diversify their income and integrate multiple commodity chains. Though diversification typically seeks to increase long-term household resilience, it complicates and multiplies efforts needed to market products, while it may restrict agricultural productivity and profitability, thereby putting livelihoods at risk.

Peasant farmers are further getting trapped in the apparent win - win solution of high quality / fair trade products. Under the promise of higher prices and better and more secure contractual arrangements, they have to comply with increasing quality standards and contract long-term debts to fund conversion and certification process. This further increases their dependency to global markets and far way consumers, who buy certified products with a good conscience. Quality / ethical products are, however, no guarantee for price stability, since markets are rapidly saturated. Moreover, peasant farmers often lack sufficient producing capacity and negotiation power to influence price setting in highly competitive world markets. Thus, within the dominant market economy paradigm, if land sharing (e.g. in the form of shaded agro-forestry systems) can make agriculture practice more compatible with conservation goals, it often does not guarantee sufficient profitability to farmers, who may in times of crisis reverse to environmentally damaging practices over very short time-frames even if this jeopardises long-term resource basis.

Nevertheless though declining and transformed, subsistence farming systems remain.

I argue that to explore the broader societal implications of different LU approaches requires stepping out of the strict disciplinary mind set of natural / quantitative sciences to embrace wider disciplinary perspectives. To critically re-evaluate this debate one needs to step out of a dominant top-down, technocratic, neo liberal perception on, and framing of, global socio-ecological problems and associated chimerical win-win solutions. Indeed, beyond disciplinary perspectives, the outcomes of this debate are critical, since academic LU conceptualisations and analyses yield explicit recommendations towards environmental and development policy, subsidies and natural resource management. The way these recommendations are incorporated by governments will in turn strongly influence local livelihoods, migration patterns and wider transformations in rural – urban systems.

(1191 Words)

Keywords: peasant farming in market economies, sustainability, land use, livelihoods, global change