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Smallholder landscapes – understanding land use practices and dynamics of change

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Millions of poor rural households in the world depend for their food and subsistence on land use systems that integrate both agriculture and forest/trees. Apart from sustaining livelihoods, these systems are also the basis for provision of local ecosystem services. However, land use research has paid little attention to such integrated smallholder land uses. A strong disciplinary and bureaucratic divide between forest and agriculture research and management creates an artificial boundary where trees on the one hand are not taken into consideration by agronomists, and where, on the other, agriculture implies degradation to foresters. In my lecture, I will talk about the need to move beyond the socially constructed dichotomy between agriculture and forest management, in order to explore future ways to reflect on how to address food security, forest regrowth, ecosystem service management and climate change adaptation.

Globalization, a changing climate, increased mobility of labour and issues of land governance, create new land use dynamics. These processes are played out differently in distinct settings and thus cause great variations. Nevertheless, land use research in the tropics is often reduced to a debate about land sharing versus land sparing, and fails to incorporate the complex and 'unruly' patterns of land use practiced by small scale land users. Drawing on studies from swidden farming systems in the Peruvian Amazon and areas of recovering forest in the Nepalese Mid-Hills, I will discuss smallholder land use strategies in response to constraints on farm labour, decreasing soil fertility and less rainfall, and the role that trees and forests play in such strategies.

Whilst there is a wealth of literature on ecosystem service management from a forest conservation perspective, smallholders' multifunctional, management practices and the identification of synergy effects from such practices in the larger landscape, beyond the level of farms, have so far received little attention. Forest regrowth, tree plantation, recuperation of degraded land and soil fertility strategies are examples of such smallholder actions from my own research, which show the potential of such local

practices. It is important to understand that such localised land use strategies are differentiated by agroecology and forest access, as well as by factors such as ethnicity, class, caste and gender.

Together with colleagues, I have developed a methodology that allows the study of heterogeneity in local land use, providing qualitative analysis of forest ecosystem service provision operating at a landscape level. We call this methodology the 'patches approach' and I will describe it in more detail during the lecture.