Title: Convergence and divergence of Agroecology and Integrated Pest Management (IPM): Implications for further development of sustainable agriculture in Cambodia

The aim to transform agriculture towards sustainable forms of production, as expressed in Sustainable Development Goal 2, is widely agreed in general terms but contested at specific road maps. Yet, farmers make key decisions about their crops and farming methods every season regardless of varying contexts in international development and national policies. In this paper, we address the tensions and contradictions between policies aimed at sustainable agriculture and decisions about farming operations in rice-growing communities in Cambodia. We focus on the introduction of Integrated Pest Management (IPM) in areas where pesticide use is prevalent. In particular we question how IPM as it is currently introduced fails to create sufficient leverage to break existing patterns of pesticide-intensive rice farming.

We address the issue using a conceptual framework with two key dimensions of sustainable agriculture: nature- or ecology-inclusiveness and social-inclusiveness. Sustainable agriculture such as developed under the label of Agroecology or organic farming, typically scores high on nature-inclusiveness but is less explicit about social-inclusiveness. We discuss this issue through an analysis of key literature, relating this to findings about the introduction of IPM in Cambodia. One important finding is that weak social ties, expressed in ad-hoc exchanges are more prominent in activities related to IPM. In contrast, pesticide sellers have developed long-term and frequent interactions that built strong social ties with farmers. Moreover, some IPM techniques require community engagement, and entail learning dependencies from stakeholders outside the community such as with producers of biological control agents. These connections necessitate a type of social inclusion which, in the Cambodia case, exemplifies divergence between Agroecology and IPM. Our paper therefore concludes that nature-inclusive forms of agriculture do not automatically imply higher social-inclusiveness. This implies a more careful analysis of varied forms of sustainable agriculture, improving the ways in which these are explicated, to benefit communities of smallholder farmers.