

Multiple perspectives on circular economies & horticulture: Learning from & about Indian natural farming

Collection of Abstracts

Ariane Krause & Franziska Häfner – IGZ

Increasing Sustainability in Horticultural Production Systems by Nutrient Cycling

As food production finds itself at a crossroads, technological changes are particularly relevant for the environmental domains of global nitrogen (N) and phosphorus (P) flows and of climate resilience. Considering waste as a resource is essential for closing nutrient loops and for realizing intersectional resource management. The production of novel recycling-fertilizers from different waste streams offers a more sustainable alternative compared to synthetic mineral fertilizers and can even provide a higher quality. With our research we want to ensure the most efficient possible use of recycling-based fertilizers in horticultural production systems and to analyze the overall sustainability of circular food production system. In our presentation we will provide a summary of research activities at IGZ, such as experiments in closed and open food production systems. Because most experiments are ongoing and collection and evaluation of results is still pending, we focus on presenting our approach, research question and methods used.

Mrinalini Kochupillai – Technical University of Munich

The New EU Organic Regulations- What can the EU learn from the Indian Experience?

Theoretical and empirical research, perhaps contrary to intuition, has shown that farmers, including small farmers, move away from farming practices that support and promote in situ agrobiodiversity conservation (and improvement), especially once they have access to new and improved varieties (Swanson and Göschl, 2000; Kochupillai, 2016). This tendency is aggravated by regulations that, in effect, act like ‘perverse incentives’, i.e. regulations that directly or indirectly incentivize activities that go against the aim of biodiversity conservation in and on soil. European laws that have, until recently, heavily regulated the (organic) seeds sector as well as the (organic) fertilizers sector, are examples of regulations that have thus far, perhaps unknowingly, acted like ‘perverse incentives.’ The presentation/paper argues that the European Parliament can reverse this tendency and incentivize conservation and improvement of in and on soil biodiversity. This can be done, at the first instance, by ensuring that the spirit of the new EU Organic Regulation (EU 2018/848) as well as the planned CE Marked Fertilizers Regulation is maintained in any/all delegated acts emerging from the EU Commission under these new/planned laws. However, in addition to ensuring the adoption of supportive acts, in order to ensure practical realization of the long term goals of these regulations, large scale (re)education, creation of semi-privately ordered ethical guidelines, as well as concrete and trustworthy marketing and monetization channels are necessary. Research results and current examples from the Indian experience are provided in support of the arguments made by the presentation.

Julia Königer - Technical University of Munich

Overcoming the Intensification of European Agriculture:
Learning from the Natural Farming Movement in India

The manure problem in Europe: Challenging the concepts of modern farming culture in the European Union by learning from the Natural Farming Movement in India

The initial point of my presentation is the duality of manure, being a nutrient and pollutant at the same time - depending on the management. The intensification of agriculture in the European Union (EU) should reveal the misleading approach, transferring manure more to a pollutant. Also, European Regulations fostering this approach will be mentioned, leading to the manure problem of the EU. The generalisation of farming methods due to linear knowledge systems should be pointed out, whereby the link to the loss of traditional knowledge in the EU should carry over into the Indian Farmer's Movement. Successes and current examples from the Indian example in overcoming consequent problems of the Green Revolution will be mentioned. After connecting the tradition of Natural Farming with the underlying research results behind, an attempt to future prospects and recommendation for the European Union should be drawn with the outlook in my further Master thesis research.

Daniel Münster – University of Heidelberg

Can Indian Natural Farming go global?

Some reflections from ethnographic work with Zero Budget Natural Farming

Zero Budget Natural Farming (ZBNF) made its first entry in Wayanad District in South India in 2013 and since then spread across the district to be adopted unevenly by a minority of small-scale farmers. My paper gives a brief introduction into my anthropological work, which situates natural farming in regional agrarian history and the changing farming practices of smallholder in Kerala. Natural farming was successful in the district, I argue in my larger work, because the district's farmers were experiencing an agrarian crisis, which manifested itself in an epidemic of farmers' suicides. Natural farming provided a language to speak about the ways agriculture had "gone wrong" in the district by articulating a critique of speculative cash crops, pesticides and monocropping. At the same time, natural farming's technologies and principle offered hope for an economic and affective revival of smallholder farming. In this presentation, I will focus on farmers who converted to Natural Farming in order to draw some tentative conclusion about Natural Farming's potential to "go global". I will elaborate on five interdependent aspects of ZBNF that contributed to its success in India, some of which, however, also made scaling up efforts difficult. First, the role of charisma and the teacher (guru) in the dissemination of ZBNF. Second, the role of aesthetics and affect in mixed-cropping styles of natural farming. Third, the recourse to Indian (Vedic) heritage and its native biota. Fourth, the placement of its knowledge and practices outside the fold of "mainstream" science. Fifth, the role of spirituality and nationalism in the movement. I will conclude by pointing to necessity of "cultural translation" for the success of Indian natural farming movements outside of South Asia.